### SEARCH REQUEST FORM

## Scientific and Technical Information Center

Requester's Full Name: MARCELA M. CORDERO GARCIA Examiner #: \$0.381 Date: 11/15/24  Art Unit: \$0.381 Phone Number 30 2-2939 Serial Number: PCT/USO3/26233  Mail Box and Bldg/Room Location: REM Results Format Preferred (circle): PAPER DISK E-MAIL  3C18/3C35							
If more than one search is submitted, please prioritize searches in order of need.							
Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, e.e., if known, Please attach a copy of the cover sheet, pertinent claims, and abstract.							
Title of Invention: CORTICOSTER	OID CONJUGAT	ES AND USES THE	REVA				
Inventors (please provide full names):	TEICHER , MA	RTIN H. AND AL	DERSEN-NAVALTA SUSAN L				
Earliest Priority Filing Date: 23/1	AUGUST/200Z	··					
*For Sequence Searches Only * Picase include appropriate serial number.			tent numbers) along with the				
PARENT 60/405688							
NO CHILD							
PLEASE SEARCH .	CLAIM 1 ANE	>					
	CLAIM 3						
(IF TOO MANY HITS	TAANKS	PLEASE USE CLM 4	TO RESTRICT)				
			(5110)				
**********************	********	*******************	*****				
STAFF USE ONLY	Type of Search	Vendors and cost wh					
Searcher Phone #. 272-252C	AA Sequence (#)	Dialog					
Searcher Location: Remacher Ed (A1)	Structure # 1	Questel Other					
Date Searcher Picked Up:	Bibliographic	Dr Link					
Date Completed: (2/7	Litigation	Lexis/Nexis					
Searcher Prep & Review Time:	Fulltext	Sequence Systems					
Clerical Prep Time.	Patent Family	WWW/Internet					
Online Time:	Other :	Other (specify)					

PTO-1590 (8-01)



# STIC Search Report Biotech-Chem Library

# STIC Database Tracking Number: 137881

TO: Marcela Cordero Garcia

Location: rem/3c35/3c18

Art Unit: 1654

Tuesday, December 07, 2004

ALSO PERTAINS TO

Case Serial Number: pctus0326233

From: David Schreiber

**Location: Biotech-Chem Library** 

Remsen E01A61 Phone: 272-2526

david.schreiber@uspto.gov

Search Notes	10/BABOBS CORTIOSTEROID	CONSUGATES
1		



=> fil reg FILE 'REGISTRY' ENTERED AT 12:31:21 ON 07 DEC 2004 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2004 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 5 DEC 2004 HIGHEST RN 792236-36-3 DICTIONARY FILE UPDATES: 5 DEC 2004 HIGHEST RN 792236-36-3

TSCA INFORMATION NOW CURRENT THROUGH MAY 21, 2004

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at: http://www.cas.org/ONLINE/DBSS/registryss.html

VAR G1=24/26 VAR G2=H/X VAR G3=H/CH3/X VAR G4=H/X VAR G5=31/CH2 VAR G6=H/C/O NODE ATTRIBUTES: DEFAULT MLEVEL IS ATOM DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES: RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 35 STEREO ATTRIBUTES: NONE

L12 12038 SEA FILE=REGISTRY SSS FUL L10

100.0% PROCESSED 18173 ITERATIONS

12038 ANSWERS

SEARCH TIME: 00.00.01

=> fil hcaplus FILE 'HCAPLUS' ENTERED AT 12:31:50 ON 07 DEC 2004 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2004 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 7 Dec 2004 VOL 141 ISS 24 FILE LAST UPDATED: 6 Dec 2004 (20041206/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

#### => d 146 all hitstr 1-65

- L46 ANSWER 1 OF 65 HCAPLUS COPYRIGHT 2004 ACS on STN
- AN 2004:934146 HCAPLUS
- ED Entered STN: 06 Nov 2004
- TI Aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compounds for treating and diagnosing cancer and viral infections
- IN Thorpe, Philip E.; Ran, Sophia
- PA USA
- SO U.S. Pat. Appl. Publ., 181 pp., Cont.-in-part of U.S. Ser. No. 621,269. CODEN: USXXCO
- DT Patent
- LA English
- IC ICM A61K039-395
- ICS C07K016-46
- NCL 424178100; 530391100
- CC 15-3 (Immunochemistry)

Section cross-reference(s): 1, 63

FAN CNT 10

FAN.CNT 10				
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 2004219155	A1	20041104	US 2003-642099	20030815
US 2004170620	A1	20040902	US 2003-621269	20030715
PRAI US 2002-396263P	P	20020715		
US 2003-621269	A2	20030715		

CLASS

```
PATENT NO.
               CLASS PATENT FAMILY CLASSIFICATION CODES
               ____
US 20040219155 ICM
                       A61K039-395
                ICS
                       C07K016-46
                       424178100; 530391100
                NCL
US 2004219155
               ECLA
                       A61K039/395+M; A61K039/395C3+M; C07K016/28A30;
                       C07K016/44
US 2004170620
               ECLA
                       A61K039/395+M; A61K039/395C3+M; C07K016/28A30;
                       C07K016/44
```

- The invention provides new methods and compns. for safe and effective tumor vascular targeting, anti-angiogenesis and tumor destruction, which methods and compns. are also surprisingly effective in treating viral infections and related diseases. The invention is based, in part, on discoveries concerning the expression and role of anionic phospholipids in tumor vasculature and the involvement of aminophospholipids and anionic phospholipids in viral entry, replication and spread. The present invention further provides particularly advantageous antibodies and immunoconjugates that bind to aminophospholipids and anionic phospholipids, and a new class of peptide-based derivs., such as duramycin-based compns., that bind to phosphatidylethanolamine.
- ST antibody aminophospholipid duramycin immunoconjugate diagnosis cancer viral infection; anticancer antiviral antibody aminophospholipid duramycin immunoconjugate
- IT DNA sequences

Protein sequences

(3G4 antibody-specifying; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and diagnosing cancer and viral infections)

IT Ricins

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (A, deglycosylated; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and diagnosing cancer and viral infections)

IT Chemokines

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (ELR- CXC; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and diagnosing cancer and viral infections)

IT Antibodies and Immunoglobulins

RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (IgG; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and diagnosing cancer and viral infections)

IT Viscum album coloratum

(Korean mistletoe, extract; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and diagnosing cancer and viral infections)

IT Leukemia inhibitory factor

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (LIF; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and diagnosing cancer and viral infections)

IT Chemokines

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (Mig (monokine induced by interferon- $\gamma$ ); aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for

```
treating and diagnosing cancer and viral infections)
IT
     Proteins
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (RIP (ribosome-inactivating protein); aminophospholipid-specific
        antibodies, immunoconjugates and duramycin-based compds. for treating
        and diagnosing cancer and viral infections)
ΙT
     Chemokines
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (SDF-1 (stromal-derived factor-1); aminophospholipid-specific
        antibodies, immunoconjugates and duramycin-based compds. for treating
        and diagnosing cancer and viral infections)
IΤ
     Enzymes
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (Serratia protease, antibody conjugates; aminophospholipid-
        specific antibodies, immunoconjugates and duramycin-based compds. for
        treating and diagnosing cancer and viral infections)
ΙT
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (TRAIL (tumor necrosis factor-related apoptosis-inducing ligand);
        aminophospholipid-specific antibodies, immunoconjugates and
        duramycin-based compds. for treating and diagnosing cancer and viral
        infections)
IT
     Annexins
     RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU
     (Therapeutic use); BIOL (Biological study); USES (Uses)
        (V; aminophospholipid-specific antibodies, immunoconjugates and
        duramycin-based compds. for treating and diagnosing cancer and viral
        infections)
IT
     Cell adhesion molecules
     RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU
     (Therapeutic use); BIOL (Biological study); USES (Uses)
        (VCAM-1; aminophospholipid-specific antibodies, immunoconjugates and
        duramycin-based compds. for treating and diagnosing cancer and viral
        infections)
ΙT
     Phospholipids
     RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU
     (Therapeutic use); BIOL (Biological study); USES (Uses)
        (acidic; aminophospholipid-specific antibodies, immunoconjugates and
        duramycin-based compds. for treating and diagnosing cancer and viral
        infections)
ΙT
     Drug delivery systems
        (aerosols; aminophospholipid-specific antibodies, immunoconjugates and
        duramycin-based compds. for treating and diagnosing cancer and viral
        infections)
ΙΤ
     Diagnosis
        (agents, antibody conjugates; aminophospholipid-specific
        antibodies, immunoconjugates and duramycin-based compds. for treating
        and diagnosing cancer and viral infections)
ΙT
     Phospholipids
     RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU
     (Therapeutic use); BIOL (Biological study); USES (Uses)
        (amine-containing; aminophospholipid-specific antibodies, immunoconjugates
        and duramycin-based compds. for treating and diagnosing cancer and
        viral infections)
TT
     Alkylating agents, biological
     Angiogenesis inhibitors
     Antibiotics
    Antitumor agents
```

Antiviral agents

```
Chemotherapy
     Coagulants
     Cytotoxic agents
     Human
     Imaging agents
     Immunotherapy
     Linking agents
     Molecular cloning
     Neoplasm
     Radiotherapy
     Tumor markers
        (aminophospholipid-specific antibodies, immunoconjugates and
        duramycin-based compds. for treating and diagnosing cancer and viral
        infections)
     Antibodies and Immunoglobulins
ΙT
     RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
     DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL
     (Biological study); PREP (Preparation); USES (Uses)
        (aminophospholipid-specific antibodies, immunoconjugates and
        duramycin-based compds. for treating and diagnosing cancer and viral
        infections)
ΙT
     Cardiolipins
     Nucleosides
     Phosphatidic acids
     Phosphatidylethanolamines
     Phosphatidylglycerols
     Phosphatidylinositols
     Phosphatidylserines
     RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU
     (Therapeutic use); BIOL (Biological study); USES (Uses)
        (aminophospholipid-specific antibodies, immunoconjugates and
        duramycin-based compds. for treating and diagnosing cancer and viral
        infections)
     Fusion proteins (chimeric proteins)
ΙT
     RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (aminophospholipid-specific antibodies, immunoconjugates and
        duramycin-based compds. for treating and diagnosing cancer and viral
        infections)
     Radionuclides
ΙT
     RL: DGN (Diagnostic use); THU (Therapeutic use); BIOL (Biological study);
     USES (Uses)
        (aminophospholipid-specific antibodies, immunoconjugates and
        duramycin-based compds. for treating and diagnosing cancer and viral
        infections)
IT
    Anthracyclines
     Cytokines
     Glucocorticoids
     Interferons
     Interleukin 12
     Osteonectin
     Retinoids
     Steroids
     Taxanes
     Thrombospondins
     Tumor necrosis factors
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (aminophospholipid-specific antibodies, immunoconjugates and
        duramycin-based compds. for treating and diagnosing cancer and viral
```

infections)

#### IT Blood serum

(anal.; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and diagnosing cancer and viral infections)

IT CD20 (antigen)

RL: BSU (Biological study, unclassified); BIOL (Biological study) (anti-; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and diagnosing cancer and viral infections)

IT Drugs

(antibody conjugates; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and diagnosing cancer and viral infections)

IT Cytotoxic agents

(antimetabolites; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and diagnosing cancer and viral infections)

IT Antibodies and Immunoglobulins

RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(bispecific; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and diagnosing cancer and viral infections)

IT Diagnosis

(cancer; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and diagnosing cancer and viral infections)

IT Drug delivery systems

(carriers; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and diagnosing cancer and viral infections)

IT Antibodies and Immunoglobulins

RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(chimeric; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and diagnosing cancer and viral infections)

IT Annexins

RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(chimeric; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and diagnosing cancer and viral infections)

IT Imaging

X-ray

(diagnostic; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and diagnosing cancer and viral infections)

IT Toxins

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (diphtheria; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and diagnosing cancer and viral infections)

IT Blood vessel

(endothelium, tumor; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and

```
diagnosing cancer and viral infections)
ΙT
     Immunoassay
        (enzyme-linked immunosorbent assay; aminophospholipid-specific
        antibodies, immunoconjugates and duramycin-based compds. for treating
        and diagnosing cancer and viral infections)
ΙT
     Toxins
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (exotoxins, Pseudomonas; aminophospholipid-specific antibodies,
        immunoconjugates and duramycin-based compds. for treating and
        diagnosing cancer and viral infections)
     Antibodies and Immunoglobulins
TΤ
     RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
     DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL
     (Biological study); PREP (Preparation); USES (Uses) (fragments, Fv, Fab', Fab, diabody, linear antibody or F(ab'), CDR,
        univalent fragment; aminophospholipid-specific antibodies,
        immunoconjugates and duramycin-based compds. for treating and
        diagnosing cancer and viral infections)
     Antibodies and Immunoglobulins
ΙT
     RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
     DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL
     (Biological study); PREP (Preparation); USES (Uses)
        (heavy chain; aminophospholipid-specific antibodies, immunoconjugates
        and duramycin-based compds. for treating and diagnosing cancer and
        viral infections)
     Antibodies and Immunoglobulins
TΤ
     RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
     DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL
     (Biological study); PREP (Preparation); USES (Uses)
        (humanized; aminophospholipid-specific antibodies, immunoconjugates and
        duramycin-based compds. for treating and diagnosing cancer and viral
        infections)
IT
     Drug delivery systems
        (immunoconjugates; aminophospholipid-specific antibodies,
        immunoconjugates and duramycin-based compds. for treating and
        diagnosing cancer and viral infections)
ΤТ
     Diagnosis
        (immunodiagnosis; aminophospholipid-specific antibodies,
        immunoconjugates and duramycin-based compds. for treating and
        diagnosing cancer and viral infections)
TΥ
     Drug delivery systems
        (immunotoxins; aminophospholipid-specific antibodies, immunoconjugates
        and duramycin-based compds. for treating and diagnosing cancer and
        viral infections)
ΙT
     Cytomegalovirus
        (infection; aminophospholipid-specific antibodies, immunoconjugates and
        duramycin-based compds. for treating and diagnosing cancer and viral
        infections)
ΙT
     Tubulins
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (inhibitors; aminophospholipid-specific antibodies, immunoconjugates
        and duramycin-based compds. for treating and diagnosing cancer and
        viral infections)
ΙT
     Drug delivery systems
        (injections, i.v.; aminophospholipid-specific antibodies,
        immunoconjugates and duramycin-based compds. for treating and
        diagnosing cancer and viral infections)
     Chemokines
TT
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
```

(interferon  $\gamma$ -inducible protein-10, IP-10; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and diagnosing cancer and viral infections)

- IT NMR (nuclear magnetic resonance)
  - (isotopes; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and diagnosing cancer and viral infections)
- IT Antibodies and Immunoglobulins
  - RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL
  - (Biological study); PREP (Preparation); USES (Uses)
    - (light chain; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and diagnosing cancer and viral infections)
- IT Antibodies and Immunoglobulins
  - RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
  - DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL
  - (Biological study); PREP (Preparation); USES (Uses)
    - (monoclonal, 3G4, (ATCC PTA 4545); aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and diagnosing cancer and viral infections)
- IT Antibodies and Immunoglobulins
  - RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
  - DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL
  - (Biological study); PREP (Preparation); USES (Uses)
    - (monoclonal; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and diagnosing cancer and viral infections)
- IT Fibronectins
  - Laminins
  - RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (peptides; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and diagnosing cancer and viral infections)
- IT Toxins
  - RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
    - (plant-, fungus- or bacteria-derived; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and diagnosing cancer and viral infections)
- IT Drug delivery systems
  - (prodrugs; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and diagnosing cancer and viral infections)
- IT Cytokines
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (proinflammatory; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and diagnosing cancer and viral infections)
- IT Bond
  - (releasable; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and diagnosing cancer and viral infections)
- IT Diagnosis
  - (serodiagnosis; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and diagnosing cancer and viral infections)
- IT Antibodies and Immunoglobulins
- RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);

- DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (single chain, scFv; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and diagnosing cancer and viral infections)
- IT Apoptosis
  (tumor cell, inducing; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and diagnosing cancer and viral infections)
- IT Alkaloids
  RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
   (vinca; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and diagnosing cancer and viral infections)
- IT Infection
   (viral; aminophospholipid-specific antibodies, immunoconjugates and
   duramycin-based compds. for treating and diagnosing cancer and viral
   infections)
  IT Interferons
  - Interferons
    RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
     (α; aminophospholipid-specific antibodies, immunoconjugates and
     duramycin-based compds. for treating and diagnosing cancer and viral
     infections)
- IT Interferons RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) ( $\beta$ ; aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and diagnosing cancer and viral infections)
- IT Enzymes
  RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
  (D-Alanylcarboxypeptidase, antibody conjugates;
  aminophospholipid-specific antibodies, immunoconjugates and duramycin-based compds. for treating and diagnosing cancer and viral infections)

- IT 790789-26-3DP, humanized or chimeric derivs. and conjugates

```
790789-28-5DP, humanized or chimeric derivs. and conjugates
     RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
     DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL
     (Biological study); PREP (Preparation); USES (Uses)
        (amino acid sequence; aminophospholipid-specific antibodies,
        immunoconjugates and duramycin-based compds. for treating and
        diagnosing cancer and viral infections)
ΙT
     9035-58-9, Blood-coagulation factor III
     RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU
     (Therapeutic use); BIOL (Biological study); USES (Uses)
        (aminophospholipid-specific antibodies, immunoconjugates and
        duramycin-based compds. for treating and diagnosing cancer and viral
        infections)
ΙT
     54-42-2, Idoxuridine
                             70-00-8, Trifluorothymidine
                                                            127-07-1, Hydroxyurea
                             1391-36-2D, Duramycin, conjugates
Stavudine 5536-17-4, Vidarabine
     768-94-5, Amantadine
                  3056-17-5, Stavudine
                                                                   7481-89-2,
     2056-98-6
                    13392-28-4, Rimantadine
                                               30516-87-1, AZT
                                                                  36791-04-5,
     Zalcitabine
                  39809-25-1, Penciclovir
                                             59277-89-3, Acyclovir
                                                                      69655-05-6,
     Ribavirin
     Didanosine
                  77181-69-2, Sorivudine
                                             82410-32-0, Gancyclovir
                               114977-28-5, Docetaxel
     113852-37-2, Cidofovir
                                                         120082-86-2
     127779-20-8, Saquinavir
                                129556-87-2, Adefovir diphosphate
                                                                     129618-40-2,
                  134678-17-4, Lamivudine 136470-78-5, Abacavir
     Nevirapine
     136817-59-9, Delavirdine
                                139110-80-8, Zanamivir 142340-99-0
143188-53-8, Lamivudine triphosphate
                                                            142340-99-6, Adefovir
     dipivoxil
                142937-65-3
                                                 150378-17-9, Indinavir
     145819-92-7, Emtricitabine triphosphate
     154598-52-4, Efavirenz 155213-67-5, Ritonavir 159989-64-7, Nelfinavir 161814-49-9, Amprenavir 196618-13-0, Oseltamivir 717854-15-4,
                                     717854-16-5, Multinucleoside resistance B
     Multinucleoside resistance A
     RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (aminophospholipid-specific antibodies, immunoconjugates and
        duramycin-based compds. for treating and diagnosing cancer and viral
        infections)
IT
     50-02-2, Dexamethasone
                               50-18-0, Cyclophosphamide
                                                             50 - 35 - 1,
                                             51-21-8, Fluorouracil
     Thalidomide
                    50-76-0, Actinomycin D
                         53-79-2, Puromycin 55-86-7, Nitrogen
     53-06-5, Cortisone
                                        59-05-2, Methotrexate
               57-22-7, Vincristine
                                                                 64 - 86 - 8,
     mustard
                                                                67 - 99 - 2
                   66-22-8, Uracil 66-81-9, Cycloheximide
     colchicine
                                         147-94-4, Cytarabine
                                                                148-82-3,
                   145-63-1, Suramin
     Aspergillin
                                            362-07-2
                                                      477-30-5, Colcemid
                 305-03-3, Chlorambucil
     Melphalan
                                                      1406-72-0, Restrictocin
     865-21-4, Vinblastine
                              1404-00-8, Mitomycin
                                4375-07-9, epipodophyllotoxin 7689-03-4,
     2998-57-4, Estramustine
                     9001-67-6D, Neuraminidase, antibody conjugates
     Camptothecin
     9001-78-9D, Alkaline phosphatase, antibody conjugates
                                9004-08-4D, Cathepsin, antibody
     9001-99-4, Ribonuclease
                  9014-01-1D, Subtilisin, antibody conjugates
     conjugates
     9014-06-6D, Penicillin amidase, antibody conjugates
                                                              9015-68-3,
                       9016-17-5D, Arylsulfatase, antibody conjugates
     L-Asparaginase
     9025-05-2D, Cytosine deaminase, antibody conjugates
     9031-11-2D, \beta-Galactosidase, antibody conjugates 9031-98-5D, Carboxypeptidase, antibody conjugates
                                                            9073-60-3D,
     antibody conjugates 9073-78-3D, Thermolysin, antibody
     conjugates 10540-29-1, Tamoxifen 11056-06-7, Bleomycin
     15663-27-1, cisplatin 17902-23-7, Tegafur 20830-81-3, Daunorubicin
     21679-14-1, Fludarabine 23110-15-8, Fumagillin
                                                          23214-92-8, Doxorubicin
     25316-40-9, Adriamycin 29767-20-2, Teniposide
                                                          31441-78-8,
                       33069-62-4, Paclitaxel
                                                33419-42-0, Etoposide
     Mercaptopurine
     37270-94-3, Platelet factor 4 56420-45-2, Epirubicin
                                                                 62996-74-1,
     staurosporine 65271-80-9, Mitoxantrone 65646-68-6, Fenretinide
```

```
75037-46-6, Gelonin
     70641-51-9, Edelfosine
                               74578-38-4, UFT
     82855-09-2, Combretastatin 83150-76-9, Octreotide 86090-08-6, Angiostatin 86243-64-3, \alphaSarcin 9505 Gemcitabine 97682-44-5, Irinotecan 98319-26-7, E
                                                                84088-42-6, Linomide
                                                          95058-81-4,
                                                98319-26-7, Finasteride
     112953-11-4, 7-Hydroxystaurosporine 123948-87-8, Topotecan 129298-91-5, AGM-1470 146426-40-6, Flavopiridol 156511-34-1 160141-09-3, L-744832 187888-07-9, Endostatin 188417-67-6, 6220127-57-1, STI571
                                                           188417-67-6, CM 101
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
         (aminophospholipid-specific antibodies, immunoconjugates and
        duramycin-based compds. for treating and diagnosing cancer and viral
        infections)
ΙT
     9034-40-6, LHRH
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
         (antagonists; aminophospholipid-specific antibodies, immunoconjugates
        and duramycin-based compds. for treating and diagnosing cancer and
        viral infections)
                                    105913-11-9, Plasminogen activator
IT
     80449-01-0, topoisomerase
     124861-55-8, TIMP 2
145809-21-8, TIMP 3
                             140208-23-7
                                            140208-24-8, TIMP 1
                                                                    142243-03-6
                             186207-03-4, TIMP 4
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
         (inhibitors; aminophospholipid-specific antibodies, immunoconjugates
        and duramycin-based compds. for treating and diagnosing cancer and
        viral infections)
ΙT
     9068-38-6, Reverse transcriptase
                                            144114-21-6, HIV protease
     RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
         (inhibitors; aminophospholipid-specific antibodies, immunoconjugates
        and duramycin-based compds. for treating and diagnosing cancer and
        viral infections)
     790789-25-2DP, humanized or chimeric derivs. and conjugates
ΙT
     790789-27-4DP, humanized or chimeric derivs. and conjugates
     RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
     DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL
     (Biological study); PREP (Preparation); USES (Uses)
         (nucleotide sequence; aminophospholipid-specific antibodies,
        immunoconjugates and duramycin-based compds. for treating and
        diagnosing cancer and viral infections)
     790794-10-4
ΙT
     RL: PRP (Properties)
         (unclaimed nucleotide sequence; aminophospholipid-specific antibodies,
        immunoconjugates and duramycin-based compds. for treating and
        diagnosing cancer and viral infections)
ΙT
     790794-11-5
     RL: PRP (Properties)
         (unclaimed protein sequence; aminophospholipid-specific antibodies,
        immunoconjugates and duramycin-based compds. for treating and
        diagnosing cancer and viral infections)
ΙT
     650591-60-9
                     716329-62-3
                                    790794-12-6
     RL: PRP (Properties)
         (unclaimed sequence; aminophospholipid-specific antibodies,
        immunoconjugates and duramycin-based compds. for treating and
        diagnosing cancer and viral infections)
ΙT
     50-02-2, Dexamethasone 53-06-5, Cortisone
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
         (aminophospholipid-specific antibodies, immunoconjugates and
        duramycin-based compds. for treating and diagnosing cancer and viral
        infections)
     50-02-2 HCAPLUS
RN
```

CN Pregna-1,4-diene-3,20-dione, 9-fluoro-11,17,21-trihydroxy-16-methyl-,  $(11\beta,16\alpha)$ - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 53-06-5 HCAPLUS

CN Pregn-4-ene-3,11,20-trione, 17,21-dihydroxy- (7CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry.

L46 ANSWER 2 OF 65 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2004:877933 HCAPLUS

DN 141:365149

ED Entered STN: 22 Oct 2004

TI Anti-PSGL-1 antibodies and scFv fragments for diagnosis, prognosis and therapy of cancer, metastasis, autoimmune disease and inflammation

IN Levanon, Avigdor; Ben-Levy, Rachel; Plaksin, Daniel; Szanton, Esther;
Hagai, Yocheved; Mar-Chaim, Hagit Hoch

PA Israel

SO U.S. Pat. Appl. Publ., 49 pp. CODEN: USXXCO

DT Patent

LA English

IC ICM C12Q001-68

ICS A61K039-395; C07K016-40

NCL 424146100; 530388260

CC 15-3 (Immunochemistry)

Section cross-reference(s): 1, 3, 8, 9, 63

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	US 2004208877	A1	20041021	US 2003-611588	20030630

```
PRAI US 2002-393491P P
                               20020701
CLASS
 PATENT NO.
            CLASS PATENT FAMILY CLASSIFICATION CODES
 _____
                       _______
US 2004208877 ICM
                       C12Q001-68
                       A61K039-395; C07K016-40
                ICS
                NCL
                       424146100; 530388260
US 2004208877 ECLA C07K016/28Z
    The present invention provides antibodies or fragments thereof that bind
     to cancer cells and are important in physiol. phenomena, such as cell
     rolling and metastasis. Therapeutic and diagnostic, prognostic or staging
    methods and compns. using such antibodies or fragments thereof are also
    provided. The methods and compns. according to the present invention can
    be used in diagnosis of and therapy for such diseases as cancer, including
     tumor growth and metastasis, leukemia, autoimmune disease, and
     inflammatory disease.
     PSGL1 monoclonal antibody scFv fragment cancer metastasis autoimmune
ST
     disease; inflammation leukemia cancer diagnosis therapy prognosis scFv
     antibody PSGL1
ΙT
    Leukemia
        (B-cell; anti-PSGL-1 antibodies and scFv fragments for diagnosis,
       prognosis and therapy of cancer, metastasis, autoimmune disease and
       inflammation)
IT
    Antibodies and Immunoglobulins
    RL: BSU (Biological study, unclassified); DGN (Diagnostic use); PRP
     (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (IgG; anti-PSGL-1 antibodies and scFv fragments for diagnosis,
       prognosis and therapy of cancer, metastasis, autoimmune disease and
       inflammation)
IT
    Glycoproteins
    RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU
     (Therapeutic use); BIOL (Biological study); USES (Uses)
        (PSGL-1 (P-selectin glycoprotein ligand-1); anti-PSGL-1 antibodies and
       scFv fragments for diagnosis, prognosis and therapy of cancer,
       metastasis, autoimmune disease and inflammation)
IT
    Leukemia
        (T-cell, acute; anti-PSGL-1 antibodies and scFv fragments for
       diagnosis, prognosis and therapy of cancer, metastasis, autoimmune
       disease and inflammation)
ΙT
    Leukemia
        (acute myelogenous; anti-PSGL-1 antibodies and scFv fragments for
       diagnosis, prognosis and therapy of cancer, metastasis, autoimmune
       disease and inflammation)
IT
    Adhesion, biological
    Cell aggregation
    Leukemia
    Thrombosis
        (anti-; anti-PSGL-1 antibodies and scFv fragments for diagnosis,
       prognosis and therapy of cancer, metastasis, autoimmune disease and
       inflammation)
    Animal tissue culture
IΤ
    Anti-inflammatory agents
    Antibacterial agents
    Anticoagulants
    Antitumor agents
    Antiviral agents
    Autoimmune disease
    Cardiovascular system, disease
```

DNA sequences

```
Drugs
Epitopes
Genetic vectors
Human
Imaging agents
Immunotherapy
Infection
Inflammation
Isotope indicators
Molecular cloning
Multiple myeloma
Phage display library
Prognosis
Protein sequences
Susceptibility (genetic)
T cell (lymphocyte)
Test kits
   (anti-PSGL-1 antibodies and scFv fragments for diagnosis, prognosis and
   therapy of cancer, metastasis, autoimmune disease and inflammation)
Gene, animal
RL: BSU (Biological study, unclassified); BIOL (Biological study)
   (anti-PSGL-1 antibodies and scFv fragments for diagnosis, prognosis and
   therapy of cancer, metastasis, autoimmune disease and inflammation)
Antibodies and Immunoglobulins
RL: BSU (Biological study, unclassified); DGN (Diagnostic use); PRP
(Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
   (anti-PSGL-1 antibodies and scFv fragments for diagnosis, prognosis and
   therapy of cancer, metastasis, autoimmune disease and inflammation)
Anthracyclines
RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU
(Therapeutic use); BIOL (Biological study); USES (Uses)
   (anti-PSGL-1 antibodies and scFv fragments for diagnosis, prognosis and
   therapy of cancer, metastasis, autoimmune disease and inflammation)
Infection
   (bacterial; anti-PSGL-1 antibodies and scFv fragments for diagnosis,
   prognosis and therapy of cancer, metastasis, autoimmune disease and
   inflammation)
Drug delivery systems
   (carriers; anti-PSGL-1 antibodies and scFv fragments for diagnosis,
   prognosis and therapy of cancer, metastasis, autoimmune disease and
   inflammation)
Cell migration
   (cell rolling; anti-PSGL-1 antibodies and scFv fragments for diagnosis,
   prognosis and therapy of cancer, metastasis, autoimmune disease and
   inflammation)
Biology
   (cell, host; anti-PSGL-1 antibodies and scFv fragments for diagnosis,
   prognosis and therapy of cancer, metastasis, autoimmune disease and
   inflammation)
Immunity
   (cell-mediated, antibody-dependent; anti-PSGL-1 antibodies and scFv
   fragments for diagnosis, prognosis and therapy of cancer, metastasis,
   autoimmune disease and inflammation)
Leukemia
   (chronic B-lymphocytic; anti-PSGL-1 antibodies and scFv fragments for
   diagnosis, prognosis and therapy of cancer, metastasis, autoimmune
   disease and inflammation)
```

TΤ

ΙT

TΤ

ΙT

IT

IT

ΙT

ΙT

ΙT

IT

Antibodies and Immunoglobulins

RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU

```
(Therapeutic use); BIOL (Biological study); USES (Uses)
        (complexes; anti-PSGL-1 antibodies and scFv fragments for diagnosis,
        prognosis and therapy of cancer, metastasis, autoimmune disease and
        inflammation)
ΙT
     Antibodies and Immunoglobulins
     Ricins
     Toxins
     RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU
     (Therapeutic use); BIOL (Biological study); USES (Uses)
        (conjugates; anti-PSGL-1 antibodies and scFv fragments for
        diagnosis, prognosis and therapy of cancer, metastasis, autoimmune
        disease and inflammation)
ΙT
     Artery, disease
        (coronary, restenosis, anti-; anti-PSGL-1 antibodies and scFv fragments
        for diagnosis, prognosis and therapy of cancer, metastasis, autoimmune
        disease and inflammation)
ΙT
        (emitters; anti-PSGL-1 antibodies and scFv fragments for diagnosis,
        prognosis and therapy of cancer, metastasis, autoimmune disease and
        inflammation)
ΙT
     Carbohydrates, biological studies
     Glycolipids
     Glycoproteins
     Lipids, biological studies
     Lipopolysaccharides
     Lipoproteins
     Peptides, biological studies
     RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU
     (Therapeutic use); BIOL (Biological study); USES (Uses)
        (epitope; anti-PSGL-1 antibodies and scFv fragments for diagnosis,
        prognosis and therapy of cancer, metastasis, autoimmune disease and
        inflammation)
ΙT
     Pseudomonas
        (exotoxin; anti-PSGL-1 antibodies and scFv fragments for diagnosis,
        prognosis and therapy of cancer, metastasis, autoimmune disease and
        inflammation)
ΙT
     RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU
     (Therapeutic use); BIOL (Biological study); USES (Uses)
        (exotoxins, conjugate; anti-PSGL-1 antibodies and scFv
        fragments for diagnosis, prognosis and therapy of cancer, metastasis,
        autoimmune disease and inflammation)
     Antibodies and Immunoglobulins
TΤ
     RL: BSU (Biological study, unclassified); DGN (Diagnostic use); PRP
     (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (fragments, scFv; anti-PSGL-1 antibodies and scFv fragments for
        diagnosis, prognosis and therapy of cancer, metastasis, autoimmune
        disease and inflammation)
     Antibodies and Immunoglobulins
TΤ
     RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU
     (Therapeutic use); BIOL (Biological study); USES (Uses)
        (heavy chain, variable; anti-PSGL-1 antibodies and scFv fragments for
        diagnosis, prognosis and therapy of cancer, metastasis, autoimmune
        disease and inflammation)
ΙT
     Diagnosis
        (immunodiagnosis; anti-PSGL-1 antibodies and scFv fragments for
        diagnosis, prognosis and therapy of cancer, metastasis, autoimmune
        disease and inflammation)
    Heart, disease
IT
```

(infarction; anti-PSGL-1 antibodies and scFv fragments for diagnosis, prognosis and therapy of cancer, metastasis, autoimmune disease and inflammation)

- IT Human immunodeficiency virus
  - (infection; anti-PSGL-1 antibodies and scFv fragments for diagnosis, prognosis and therapy of cancer, metastasis, autoimmune disease and inflammation)
- IT Antibodies and Immunoglobulins
  - RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
    - (light chain, variable; anti-PSGL-1 antibodies and scFv fragments for diagnosis, prognosis and therapy of cancer, metastasis, autoimmune disease and inflammation)
- IT Polymers, biological studies
  - RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
    - (lipophilic; anti-PSGL-1 antibodies and scFv fragments for diagnosis, prognosis and therapy of cancer, metastasis, autoimmune disease and inflammation)
- IT Drug delivery systems
  - (liposomes; anti-PSGL-1 antibodies and scFv fragments for diagnosis, prognosis and therapy of cancer, metastasis, autoimmune disease and inflammation)
- IT Conformation
  - (loop, protein; anti-PSGL-1 antibodies and scFv fragments for diagnosis, prognosis and therapy of cancer, metastasis, autoimmune disease and inflammation)
- IT Neoplasm
  - (metastasis, anti-; anti-PSGL-1 antibodies and scFv fragments for diagnosis, prognosis and therapy of cancer, metastasis, autoimmune disease and inflammation)
- IT Antibodies and Immunoglobulins
  - RL: BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (monoclonal; anti-PSGL-1 antibodies and scFv fragments for diagnosis, prognosis and therapy of cancer, metastasis, autoimmune disease and inflammation)
- IT Lymphocyte
  - (natural killer cell; anti-PSGL-1 antibodies and scFv fragments for diagnosis, prognosis and therapy of cancer, metastasis, autoimmune disease and inflammation)
- IT Drug delivery systems
  - (polymer-bound; anti-PSGL-1 antibodies and scFv fragments for diagnosis, prognosis and therapy of cancer, metastasis, autoimmune disease and inflammation)
- IT Radionuclides, biological studies
  - RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
    - (positron or X-ray emitters; anti-PSGL-1 antibodies and scFv fragments for diagnosis, prognosis and therapy of cancer, metastasis, autoimmune disease and inflammation)
- IT Molecular association
  - (protein-protein interaction, sulfated tyrosine-dependent; anti-PSGL-1 antibodies and scFv fragments for diagnosis, prognosis and therapy of cancer, metastasis, autoimmune disease and inflammation)
- IT Artery, disease
  - (restenosis, anti-; anti-PSGL-1 antibodies and scFv fragments for diagnosis, prognosis and therapy of cancer, metastasis, autoimmune disease and inflammation)

```
ΙT
     Eye, disease
        (retinopathy; anti-PSGL-1 antibodies and scFv fragments for diagnosis,
        prognosis and therapy of cancer, metastasis, autoimmune disease and
        inflammation)
ΙT
     Infection
        (viral; anti-PSGL-1 antibodies and scFv fragments for diagnosis,
        prognosis and therapy of cancer, metastasis, autoimmune disease and
        inflammation)
ΙT
     Radionuclides, biological studies
     RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU
     (Therapeutic use); BIOL (Biological study); USES (Uses)
        (\alpha emitters; anti-PSGL-1 antibodies and scFv fragments for
        diagnosis, prognosis and therapy of cancer, metastasis, autoimmune
        disease and inflammation)
ΙT
     Interferons
     RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU
     (Therapeutic use); BIOL (Biological study); USES (Uses)
        (a; anti-PSGL-1 antibodies and scFv fragments for diagnosis,
        prognosis and therapy of cancer, metastasis, autoimmune disease and
        inflammation)
IT
     Radionuclides, biological studies
     RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU
     (Therapeutic use); BIOL (Biological study); USES (Uses)
        (β emitters; anti-PSGL-1 antibodies and scFv fragments for
        diagnosis, prognosis and therapy of cancer, metastasis, autoimmune
        disease and inflammation)
IT
     Radionuclides, biological studies
     RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU
     (Therapeutic use); BIOL (Biological study); USES (Uses)
        (\gamma \text{ emitters}; \text{ anti-PSGL-1} \text{ antibodies and scFv fragments for})
        diagnosis, prognosis and therapy of cancer, metastasis, autoimmune
        disease and inflammation)
IT
     779371-02-7P
     RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
     DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL
     (Biological study); PREP (Preparation); USES (Uses)
        (amino acid sequence; anti-PSGL-1 antibodies and scFv fragments for
        diagnosis, prognosis and therapy of cancer, metastasis, autoimmune
        disease and inflammation)
ΙT
     212783-20-5P
                    212783-31-8P
                                    642928-14-1P
     RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
     DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL
     (Biological study); PREP (Preparation); USES (Uses)
        (anti-PSGL-1 antibodies and scFv fragments for diagnosis, prognosis and
        therapy of cancer, metastasis, autoimmune disease and inflammation)
     40704-75-4, N-(2-Hydroxypropyl)methacrylamide homopolymer
ΙT
                                                                 75037-46-6D,
     Gelonin, conjugates
     RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU
     (Therapeutic use); BIOL (Biological study); USES (Uses)
        (anti-PSGL-1 antibodies and scFv fragments for diagnosis, prognosis and
        therapy of cancer, metastasis, autoimmune disease and inflammation)
                                50-35-1D, Thalidomide, derivs.
                                                                   50-78-2,
     50-18-0, Cyclophosphamide
IT
     Aspirin 53-03-2D, Prednisone, derivs.
                                             53-86-1, Indomethacin
                                      127-07-1D, Hydroxyurea, derivs.
     57-22-7D, Vincristine, derivs.
     147-94-4D, Cytarabine, derivs.
                                      305-03-3D, Chlorambucil, derivs.
     9004-54-0, Dextran, biological studies 9004-61-9,
                                                      10043-66-0,
     Hyaluronic acid
                       9041-08-1, Dalteparin sodium
     Iodine-131, biological studies 10098-91-6, Yttrium-90, biological
             11056-06-7D, Bleomycin, derivs.
                                                13968-53-1, Ruthenium-103,
     studies
```

```
biological studies 13981-56-1, Fluorine-18, biological studies
13982-78-0, Mercury-203, biological studies 14041-48-6, Thulium-165, biological studies 14119-09-6, Gallium-67, biological studies
14158-32-8, Iodine-126, biological studies 14191-71-0, Indium-115,
biological studies 14331-95-4, Ruthenium-105, biological studies 14390-71-7, Tellurium-122, biological studies 14391-22-1, Thulium-167,
biological studies 14834-67-4, Iodine-133, biological studies
14885-78-0, Indium-113, biological studies
                                                14900-13-1, Thulium-168,
                      14932-42-4, Xenon-133, biological studies
biological studies
15307-86-5, Diclofenac 15663-27-1D, cis-Platinum, derivs. 15687-27-1,
           15715-08-9, Iodine-123, biological studies
                                                              15756-62-4,
Ruthenium-95, biological studies 15757-14-9, Gallium-68, biological studies 15758-35-7, Ruthenium-97, biological studies 15765-39-6,
Bromine-77, biological studies 15776-20-2, Bismuth-213, biological
           20830-81-3D, Daunorubicin, derivs.
                                                    21679-14-1D, Fludarabine,
           22204-53-1, Naproxen
                                    23214-92-8D, Doxorubicin, derivs.
derivs.
30516-87-1, Zidovudine 33069-62-4D, Taxol, derivs.
                                                             33455-08-2,
Mercury-207, biological studies 35014-81-4, Rhenium-199, biological studies 38194-50-2, Sulindac 39472-31-6D, Carminomycin, derivs.
51146-56-6, Dexibuprofen 51692-52-5, Rhenium-201, biological studies
51692-56-9, Rhenium-205, biological studies
                                                  51803-78-2, Nimesulide
52549-17-4, Pranoprofen 56420-45-2D, Epirubicin, derivs.
                                                                   58957-92-9D,
Idarubicin, derivs. 59277-89-3, Acyclovir
                                                   63521-85-7D, Esorubicin,
          66211-92-5D, Detorubicin, derivs. 7399, Limaprost 74711-43-6, Zaltoprofen
derivs.
                                                   73963-72-1, Cilostazol
74397-12-9, Limaprost
                                                       75706-12-6, Leflunomide
79867-78-0D, Morpholinodaunorubicin, derivs. 80790-68-7D, Morpholinodoxorubicin, derivs. 82410-32-0, Ganciclovir 83712-60-1,
Defibrotide 85622-93-1D, Temozolomide, derivs. 87344-06-7, Amtolmetin
guacil 90101-16-9, Droxicam 108852-90-0D, Methoxymorpholinyldoxorubicin, derivs. 1134
                                            113440-58-7D, Calicheamicin,
                                      169590-42-5, Celecoxib 173146-27-5,
           162011-90-7, Rofecoxib
Denileukin diftitox 262423-20-1, Subreum 378253-17-9, Krypton-81m,
                       378784-45-3, Technetium-99m, biological studies
biological studies
378784-46-4, Tellurium-121m, biological studies 378784-50-0,
                                       425603-01-6, WinRho SDF
Tellurium-125m, biological studies
640734-07-2, Clorcromene
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
(Biological study); USES (Uses)
   (anti-PSGL-1 antibodies and scFv fragments for diagnosis, prognosis and
   therapy of cancer, metastasis, autoimmune disease and inflammation)
12585-85-2, Positron
RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU
(Therapeutic use); BIOL (Biological study); USES (Uses)
   (emitters; anti-PSGL-1 antibodies and scFv fragments for diagnosis,
   prognosis and therapy of cancer, metastasis, autoimmune disease and
   inflammation)
956-46-7, L-Tyrosine O-sulfate
RL: BSU (Biological study, unclassified); BIOL (Biological study)
   (motif; anti-PSGL-1 antibodies and scFv fragments for diagnosis,
   prognosis and therapy of cancer, metastasis, autoimmune disease and
   inflammation)
145646-22-6 212783-21-6
                               330163-86-5
                                              442527-56-2
                                                            442527-66-4
442527-67-5 442528-29-2
                              442528-31-6
                                              485815-21-2
                                                              640723-99-5
640724-08-9 642928-16-3
                               642928-17-4
                                              642928-18-5
                                                              779332-25-1
779371-78-7
              779371-79-8
RL: PRP (Properties)
   (unclaimed sequence; anti-PSGL-1 antibodies and scFv fragments for
   diagnosis, prognosis and therapy of cancer, metastasis, autoimmune
   disease and inflammation)
```

ΙT

ΙT

ΤT

IT 53-03-2D, Prednisone, derivs. 9004-61-9,

Hyaluronic acid

 $\overline{\text{RL}}\colon \text{BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)$ 

(anti-PSGL-1 antibodies and scFv fragments for diagnosis, prognosis and therapy of cancer, metastasis, autoimmune disease and inflammation)

RN 53-03-2 HCAPLUS

CN Pregna-1,4-diene-3,11,20-trione, 17,21-dihydroxy- (8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 9004-61-9 HCAPLUS

CN Hyaluronic acid (8CI, 9CI) (CA INDEX NAME)

#### \*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

- L46 ANSWER 3 OF 65 HCAPLUS COPYRIGHT 2004 ACS on STN
- AN 2004:856929 HCAPLUS
- DN 141:348831
- ED Entered STN: 18 Oct 2004
- TI Antibodies specific to epitopes involving cell rolling, metastasis and inflammation for treatment of tumor, restenosis, thrombosis, autoimmune disease and inflammation
- IN Lazarovits, Janette; Nimrod, Abraham; Hoch, Mar-Chaim Hagit; Levanon, Avigdor
- PA Israel
- SO U.S. Pat. Appl. Publ., 22 pp.

CODEN: USXXCO

DT Patent

- LA English
- IC ICM A61K039-395
- NCL 424178100
- CC 15-3 (Immunochemistry)

Section cross-reference(s): 1, 3

FAN.CNT 1

11111.0111					
PATENT NO.		KIND	DATE	APPLICATION NO.	DATE
PI US 20042020	665	A1	20041014	US 2003-610843	20030630
PRAI US 2002-393	3453P	P	20020701	•	
CLASS					
PATENT NO.	CLASS	PATENT	FAMILY CLASS	SIFICATION CODES	

US 2004202665 ICM A61K039-395 NCL 424178100

AB The present invention relates to compns. utilizing an agent and an

ST

IT

TΤ

IT

ΙT

TT

ΙT

TΤ

```
antibody, or fragment thereof. In these compns., the agents, including
agents such as anti-cancer, anti-metastasis, anti-leukemia, anti-disease,
anti-adhesion, anti-thrombosis, anti-restenosis, anti-autoimmune,
anti-aggregation, anti-bacterial, anti-viral, and anti-inflammatory
agents, can be complexed or combined with or conjugated to the
antibodies, or fragments thereof. In addition, the agent and/or the
antibody, or fragment thereof, can be present in the composition in a sub-clin.
amount, which is an amount that is less than the amount of the agent generally
found to be clin. effective when the agent is administered alone.
Preferably, in these compns. of the present invention, the agent is an
anthracycline or a derivative thereof, e.g., doxorubicin (adriamycin) or a
derivative thereof. The invention provides the protein sequence of human
anti-platelet single chain antibodies.
antibody sulfated tyrosine epitope cell rolling metastasis inflammation
autoimmune; restenosis thrombosis immunotherapy antibody; human anti
platelet single chain antibody sequence
Platelet (blood)
   (-matrix, -platelet, -cell complex formation, inhibiting; antibodies
   specific to epitopes involving cell rolling, metastasis and
   inflammation for treatment of tumor, restenosis, thrombosis, autoimmune
   disease and inflammation)
Leukemia
   (B-cell, treatment of; antibodies specific to epitopes involving cell
   rolling, metastasis and inflammation for treatment of tumor,
   restenosis, thrombosis, autoimmune disease and inflammation)
Complement
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
(Biological study); USES (Uses)
   (CC4, conjugated or complexed with antibody; antibodies
   specific to epitopes involving cell rolling, metastasis and
   inflammation for treatment of tumor, restenosis, thrombosis, autoimmune
   disease and inflammation)
Glycoproteins
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
(Biological study); USES (Uses)
   (GPIb, \alpha, conjugated or complexed with antibody;
   antibodies specific to epitopes involving cell rolling, metastasis and
   inflammation for treatment of tumor, restenosis, thrombosis, autoimmune
   disease and inflammation)
Glycoproteins
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
(Biological study); USES (Uses)
   (PSGL-1 (P-selectin glycoprotein ligand-1), conjugated or
   complexed with antibody; antibodies specific to epitopes involving cell
   rolling, metastasis and inflammation for treatment of tumor,
   restenosis, thrombosis, autoimmune disease and inflammation)
Leukemia
   (acute myelogenous, treatment of; antibodies specific to epitopes
   involving cell rolling, metastasis and inflammation for treatment of
   tumor, restenosis, thrombosis, autoimmune disease and inflammation)
Anti-inflammatory agents
Antibacterial agents
Anticoagulants
Antitumor agents
Antiviral agents
Epitopes
Human
Immunoradiotherapy
Immunotherapy
```

```
X-ray
        (antibodies specific to epitopes involving cell rolling, metastasis and
        inflammation for treatment of tumor, restenosis, thrombosis, autoimmune
        disease and inflammation)
ΙT
     Antibodies and Immunoglobulins
     RL: BSU (Biological study, unclassified); PRP (Properties); THU
     (Therapeutic use); BIOL (Biological study); USES (Uses)
        (antibodies specific to epitopes involving cell rolling, metastasis and
        inflammation for treatment of tumor, restenosis, thrombosis, autoimmune
        disease and inflammation)
     Polyoxyalkylenes, biological studies
ΙT
     Radionuclides, biological studies
     Ricins
     Toxins
     RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (antibodies specific to epitopes involving cell rolling, metastasis and
        inflammation for treatment of tumor, restenosis, thrombosis, autoimmune
        disease and inflammation)
ΙT
    Drug delivery systems
        (carriers; antibodies specific to epitopes involving cell rolling,
        metastasis and inflammation for treatment of tumor, restenosis,
        thrombosis, autoimmune disease and inflammation)
ΙT
    Cell migration
        (cell rolling; antibodies specific to epitopes involving cell rolling,
        metastasis and inflammation for treatment of tumor, restenosis,
        thrombosis, autoimmune disease and inflammation)
IT
    Leukemia
        (chronic B-lymphocytic, treatment of; antibodies specific to epitopes
        involving cell rolling, metastasis and inflammation for treatment of
        tumor, restenosis, thrombosis, autoimmune disease and inflammation)
ΙT
    Pseudomonas
        (exotoxin; antibodies specific to epitopes involving cell rolling,
        metastasis and inflammation for treatment of tumor, restenosis,
        thrombosis, autoimmune disease and inflammation)
ΙT
     Toxins
     RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (exotoxins, PE40 and PE38; antibodies specific to epitopes involving
        cell rolling, metastasis and inflammation for treatment of tumor,
        restenosis, thrombosis, autoimmune disease and inflammation)
ΙT
    Anthracyclines
     RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (for therapy; antibodies specific to epitopes involving cell rolling,
       metastasis and inflammation for treatment of tumor, restenosis,
        thrombosis, autoimmune disease and inflammation)
    Antibodies and Immunoglobulins
ΙT
     RL: BSU (Biological study, unclassified); PRP (Properties); THU
     (Therapeutic use); BIOL (Biological study); USES (Uses)
        (fragments; antibodies specific to epitopes involving cell rolling,
        metastasis and inflammation for treatment of tumor, restenosis,
        thrombosis, autoimmune disease and inflammation)
     Drug delivery systems
ΙT
        (immunoconjugates; antibodies specific to epitopes involving cell
        rolling, metastasis and inflammation for treatment of tumor,
        restenosis, thrombosis, autoimmune disease and inflammation)
IT
    Drug delivery systems
```

(immunotoxins; antibodies specific to epitopes involving cell rolling,

```
metastasis and inflammation for treatment of tumor, restenosis,
        thrombosis, autoimmune disease and inflammation)
IT
     Adhesion, biological
        (inhibition of; antibodies specific to epitopes involving cell rolling,
        metastasis and inflammation for treatment of tumor, restenosis,
        thrombosis, autoimmune disease and inflammation)
IΤ
     Polymers, biological studies
     RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (lipophilic and hydrophilic; antibodies specific to epitopes involving
        cell rolling, metastasis and inflammation for treatment of tumor,
        restenosis, thrombosis, autoimmune disease and inflammation)
ΙT
     Drug delivery systems
        (liposomes; antibodies specific to epitopes involving cell rolling,
        metastasis and inflammation for treatment of tumor, restenosis,
        thrombosis, autoimmune disease and inflammation)
     Proteoglycans, biological studies
IT
     RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (lumicans, conjugated or complexed with antibody; antibodies
        specific to epitopes involving cell rolling, metastasis and
        inflammation for treatment of tumor, restenosis, thrombosis, autoimmune
        disease and inflammation)
ΙT
     Neoplasm
        (metastasis, treatment of; antibodies specific to epitopes involving
        cell rolling, metastasis and inflammation for treatment of tumor,
        restenosis, thrombosis, autoimmune disease and inflammation)
     Antibodies and Immunoglobulins
IT
     RL: BSU (Biological study, unclassified); PRP (Properties); THU
     (Therapeutic use); BIOL (Biological study); USES (Uses)
        (monoclonal; antibodies specific to epitopes involving cell rolling,
        metastasis and inflammation for treatment of tumor, restenosis,
        thrombosis, autoimmune disease and inflammation)
TΤ
     Protein sequences
        (of human antibodies; antibodies specific to epitopes involving cell
        rolling, metastasis and inflammation for treatment of tumor,
        restenosis, thrombosis, autoimmune disease and inflammation)
TΤ
    Sulfation
        (of tyrosine; antibodies specific to epitopes involving cell rolling,
        metastasis and inflammation for treatment of tumor, restenosis,
        thrombosis, autoimmune disease and inflammation)
ΙT
    Cell aggregation
        (platelet, inhibition of; antibodies specific to epitopes involving
        cell rolling, metastasis and inflammation for treatment of tumor,
        restenosis, thrombosis, autoimmune disease and inflammation)
IΤ
     Drug delivery systems
        (polymer-bound; antibodies specific to epitopes involving cell rolling,
        metastasis and inflammation for treatment of tumor, restenosis,
        thrombosis, autoimmune disease and inflammation)
ΙT
    Artery, disease
        (restenosis, treatment of; antibodies specific to epitopes involving
        cell rolling, metastasis and inflammation for treatment of tumor,
        restenosis, thrombosis, autoimmune disease and inflammation)
IT
     Antibodies and Immunoglobulins
     RL: BSU (Biological study, unclassified); PRP (Properties); THU
     (Therapeutic use); BIOL (Biological study); USES (Uses)
        (single chain; antibodies specific to epitopes involving cell rolling,
        metastasis and inflammation for treatment of tumor, restenosis,
        thrombosis, autoimmune disease and inflammation)
```

```
ΙT
      Protein motifs
          (sulfated L-tyrosine; antibodies specific to epitopes involving cell
          rolling, metastasis and inflammation for treatment of tumor,
          restenosis, thrombosis, autoimmune disease and inflammation)
 IT
      Autoimmune disease
      Inflammation
      Leukemia
      Multiple myeloma
      Neoplasm
      Thrombosis
          (treatment of; antibodies specific to epitopes involving cell rolling,
         metastasis and inflammation for treatment of tumor, restenosis,
         thrombosis, autoimmune disease and inflammation)
 IT
      Cell proliferation
          (tumor, inhibition of; antibodies specific to epitopes involving cell
          rolling, metastasis and inflammation for treatment of tumor,
      restenosis, thrombosis, autoimmune disease and inflammation) Radionuclides, biological studies
IT
      RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
      (Biological study); USES (Uses)
          (α emitters, for radiotherapy; antibodies specific to epitopes
          involving cell rolling, metastasis and inflammation for treatment of
         tumor, restenosis, thrombosis, autoimmune disease and inflammation)
 IT
      Interferons
      RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
      (Biological study); USES (Uses)
          (\alpha, \text{ for therapy; antibodies specific to epitopes involving cell}
         rolling, metastasis and inflammation for treatment of tumor,
      restenosis, thrombosis, autoimmune disease and inflammation) Radionuclides, biological studies
 ΙT
      RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
      (Biological study); USES (Uses)
          (\beta emitters, for radiotherapy; antibodies specific to epitopes
         involving cell rolling, metastasis and inflammation for treatment of
         tumor, restenosis, thrombosis, autoimmune disease and inflammation)
 IT
      Radionuclides, biological studies
      RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
      (Biological study); USES (Uses)
          (y emitters, for radiotherapy; antibodies specific to epitopes
         involving cell rolling, metastasis and inflammation for treatment of
         tumor, restenosis, thrombosis, autoimmune disease and inflammation)
 IT
      Fibrinogens
      RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
      (Biological study); USES (Uses)
          (\gamma', conjugated or complexed with antibody; antibodies
         specific to epitopes involving cell rolling, metastasis and
         inflammation for treatment of tumor, restenosis, thrombosis, autoimmune
         disease and inflammation)
      21442-01-3, N-(2-Hydroxypropyl)methacrylamide
 IT
      RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
      (Biological study); USES (Uses)
          (HPMA, based drug delivery; antibodies specific to epitopes involving
         cell rolling, metastasis and inflammation for treatment of tumor,
         restenosis, thrombosis, autoimmune disease and inflammation) 612-27-0 774612-28-1 774612-29-2
      774612-27-0
 TT
      RL: BSU (Biological study, unclassified); PRP (Properties); THU
      (Therapeutic use); BIOL (Biological study); USES (Uses)
          (amino acid sequence; antibodies specific to epitopes involving cell
         rolling, metastasis and inflammation for treatment of tumor,
```

```
restenosis, thrombosis, autoimmune disease and inflammation)
ΙT
        50-18-0D, Cyclophosphamide, conjugated or complexed with
                           50-78-2D, Aspirin, conjugated or complexed with 53-86-1D, Indomethacin, conjugated or complexed with 60-18-4D, Tyrosine, sulfated derivative 9001-26-7D,
        antibody
        antibody
                                                                                                   9001-26-7D, Prothrombin,
        antibody
        conjugated or complexed with antibody 9004-61-9D,
        Hyaluronic acid., conjugated or complexed with antibody
        9005-49-6D, Heparin, conjugated or complexed with antibody
        9041-08-1D, Dalteparin sodium, conjugated or complexed with
                           15307-86-5D, Diclofenac, conjugated or complexed with 15687-27-1D, Ibuprofen, conjugated or complexed with
        antibody
        antibody
                           22204-53-1D, Naproxen, conjugated or complexed with
        antibody
                           30516-87-1D, Zidovudine, conjugated or complexed with
        antibody
                           38194-50-2D, Sulindac, conjugated or complexed with 51146-56-6D, Dexibuprofen, conjugated or complexed
        antibody
        antibody
                                    51803-78-2D, Nimesulide, conjugated or complexed
        with antibody
                                    52549-17-4D, Pranoprofen, conjugated or
        with antibody
                                                    59277-89-3D, Acyclovir, conjugated or
        complexed with antibody
                                                   73963-72-1D, Cilostazol, conjugated or 74397-12-9D, Limaprost, conjugated or
        complexed with antibody
        complexed with antibody
                                                  74711-43-6D, Zaltoprofen, conjugated
        complexed with antibody
        or complexed with antibody 75706-12-6D, Leflunomide, conjugated
                                                          82410-32-0D, Ganciclovir, conjugated
        or complexed with antibody
                                                          83712-60-1D, Defibrotide, conjugated
        or complexed with antibody
                                                       87344-06-7D, Amtolmetin guacil,
        or complexed with antibody
        conjugated or complexed with antibody 90101-16-9D, Droxicam,
        conjugated or complexed with antibody conjugated conjugated or complexed with antibody conjugated conjugate
        diffiitox, conjugated or complexed with antibody
                                                                                              262423-20-1D,
        Subreum, conjugated or complexed with antibody
                                                                                             425603-01-6D,
        WinRho SDF, conjugated or complexed with antibody
        640734-07-2D, Clorcromene, conjugated or complexed with antibody
        RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
         (Biological study); USES (Uses)
              (antibodies specific to epitopes involving cell rolling, metastasis and
             inflammation for treatment of tumor, restenosis, thrombosis, autoimmune
             disease and inflammation)
                                268723-76-8
                                                        442527-61-9
ΙT
        212783-20-5
        RL: BSU (Biological study, unclassified); PRP (Properties); THU
         (Therapeutic use); BIOL (Biological study); USES (Uses)
              (antibody CDR1 region; antibodies specific to epitopes involving cell
             rolling, metastasis and inflammation for treatment of tumor,
             restenosis, thrombosis, autoimmune disease and inflammation)
IT
        642928-14-1
        RL: BSU (Biological study, unclassified); PRP (Properties); THU
         (Therapeutic use); BIOL (Biological study); USES (Uses)
              (antibody CDR2 region; antibodies specific to epitopes involving cell
             rolling, metastasis and inflammation for treatment of tumor,
             restenosis, thrombosis, autoimmune disease and inflammation)
IT
        212783-31-8
        RL: BSU (Biological study, unclassified); PRP (Properties); THU
         (Therapeutic use); BIOL (Biological study); USES (Uses)
              (antibody CDR3 region; antibodies specific to epitopes involving cell
             rolling, metastasis and inflammation for treatment of tumor,
             restenosis, thrombosis, autoimmune disease and inflammation)
        9004-54-0, Dextran, biological studies 25322-68-3, Polyethylene glycol
ΙT
        RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
        (Biological study); USES (Uses)
```

```
(drug delivery; antibodies specific to epitopes involving cell rolling,
         metastasis and inflammation for treatment of tumor, restenosis,
          thrombosis, autoimmune disease and inflammation)
ΙT
                                                          10098-91-6, Yttrium90,
      10043-66-0, Iodine131, biological studies
                               12585-85-2, Positron 13968-53-1, Ruthenium103, 13981-51-6, Mercury197, biological studies
      biological studies
      biological studies
      13981-56-1, Fluorine18, biological studies 13982-78-0, Mercury203, biological studies 14041-48-6, Thulium165, biological studies
      14119-09-6, Gallium67, biological studies 14133-76-7, Technetium99, biological studies 14158-32-8, Iodine126, biological studies
      14304-79-1, Tellurium121, biological studies 14331-95-4, Ruthenium105,
     biological studies 14378-53-1, Rh 101, biological studies 14390-71-7, Tellurium122, biological studies 14390-73-9, Tellurium125, biological studies 14391-22-1, Thulium167, biological studies 14834-67-4, Tedino123, biological studies 14834-67-4,
                                           7, biological studies 14834-67-4, 14885-78-0, Indium113, biological studies
      Iodine133, biological studies
      14900-13-1, Thulium168, biological studies
                                                          14913-89-4, Rh 105,
      biological studies 14932-42-4, Xe 133, biological studies 15678-91-8, Krypton81, biological studies 15715-08-9, Iodine123, biological studies
      15750-15-9, Indium111, biological studies
                                                           15756-62-4, Ruthenium95,
                              15757-14-9, Gallium68, biological studies
      biological studies
      15758-35-7, Ruthenium97, biological studies 15765-39-6, Bromine77,
                              15765-79-4, Rh 99, biological studies
      biological studies
      Bismuth213, biological studies
      RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
      (Biological study); USES (Uses)
          (for radiotherapy; antibodies specific to epitopes involving cell
         rolling, metastasis and inflammation for treatment of tumor,
         restenosis, thrombosis, autoimmune disease and inflammation)
      50-18-0, Cyclophosphamide
                                      50-35-1, Thalidomide 53-03-2,
ΙT
      Prednisone
                      57-22-7, Vincristine 127-07-1, Hydroxyurea
                                                                               147-94-4,
                      305-03-3, Chlorambucil 11056-06-7, Bleomycin
                                                                                 15663-27-1,
      Cytarabine
     cis-Platinum 20830-81-3, Daunorubicin 21679-14-1, Fludarabine 23214-92-8, Doxorubicin 33069-62-4, Taxol 58957-92-9, Idarubicin 79867-78-0, Morpholinodaunorubicin 80790-68-7, Morpholinodoxorubicin
      85622-93-1, Temozolomide
113440-58-7, Calicheamicin
                                      108852-90-0, Methoxymorpholinyldoxorubicin
      RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
      (Biological study); USES (Uses)
          (for therapy; antibodies specific to epitopes involving cell rolling,
         metastasis and inflammation for treatment of tumor, restenosis,
         thrombosis, autoimmune disease and inflammation)
      9004-61-9D, Hyaluronic acid., conjugated or
ΤТ
      complexed with antibody
      RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
      (Biological study); USES (Uses)
          (antibodies specific to epitopes involving cell rolling, metastasis and
         inflammation for treatment of tumor, restenosis, thrombosis, autoimmune
         disease and inflammation)
RN
      9004-61-9 HCAPLUS
CN
      Hyaluronic acid (8CI, 9CI) (CA INDEX NAME)
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
      53-03-2, Prednisone
IT
      RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
      (Biological study); USES (Uses)
          (for therapy; antibodies specific to epitopes involving cell rolling,
         metastasis and inflammation for treatment of tumor, restenosis,
         thrombosis, autoimmune disease and inflammation)
      53-03-2 HCAPLUS
RN
```

CN Pregna-1, 4-diene-3, 11, 20-trione, 17, 21-dihydroxy- (8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry.

- ANSWER 4 OF 65 HCAPLUS COPYRIGHT 2004 ACS on STN L46
- 2004:802607 HCAPLUS AN
- DN 141:312949
- Entered STN: 01 Oct 2004 ED
- TIAnti-CD22 antibodies conjugated with cytotoxic drug for treating cancer, carcinoma, sarcoma and B cell lymphoma/leukemia
- Kunz, Arthur; Moran, Justin Keith; Rubino, Joseph Thomas; Jain, Neera; INVidunas, Eugene Joseph; Simpson, John Mclean; Merchant, Nishith; Dijoseph, John Francis; Ruppen, Mark Edward; Damle, Nitin Krishnaji; Robbins, Paul David; Popplewell, Andrew George
- PAWyeth Holdings Corporation, USA
- U.S. Pat. Appl. Publ., 90 pp., Cont.-in-part of U.S. Ser. No. 428,894. SO CODEN: USXXCO
- DTPatent
- LA English
- IC ICM C07K016-46
  - ICS C07K014-47
- 530391100; 530403000; 530409000 NCL
- 15-3 (Immunochemistry)

Section cross-reference(s): 3, 9, 63

FAN.	CNT 2					
	PATENT NO.		KIND	DATE	APPLICATION NO.	DATE
ΡI	US 20041929	00	A1	20040930	US 2003-699874	20031103
	US 20040827	64	A1	20040429	US 2003-428894	20030502
PRAI	US 2002-377	440P	P	20020502		
	US 2003-428	894	A2	20030502		
CLASS	5					
PATE	ENT NO.	CLASS	PATENT	FAMILY CLASS	IFICATION CODES	
US 2	2004192900	ICM	C07K016	-46		
		ICS	C07K014	-47		
		NCL	5303911	00. 53040300	0; 530409000	
TIC 1	2004192900	ECLA		•	/00W; A61K047/48T2C8H;	
05 4	2004192900	ECTA			/00W; A01K04//4012Con,	
			A61KU4/	/48T4B28		

AΒ Methods for preparing monomeric cytotoxic drug/carrier conjugates with a drug loading significantly higher than in previously reported procedures and with decreased aggregation and low conjugate fraction (LCF) are described. Cytotoxic drug derivative/antibody conjugates, compns. comprising the conjugates and uses

```
of the conjugates are also described. Monomeric calicheamicin
     derivative/anti-CD22 antibody conjugates, compns. comprising the
     conjugates and uses of the conjugates are also
     described. The anti-CD22 antibody is a monoclonal antibody, human
     antibody, chimeric antibody, humanized antibody or fragment. The
     cytotoxic drug is a calicheamicin, thiotepa, taxane, vincristine,
     daunorubicin, doxorubicin, epirubicin, esperamicin, actinomycin,
     anthramycin, azaserine, bleomycin, tamoxifen, idarubicin, etc.
     cytotoxic drug antibody CD22 immunoconjugate carcinoma sarcoma cancer
     therapy; B cell lymphoma leukemia calicheamicin deriv antibody
     conjugate
ΙT
     Leukemia
     Lymphoma
        (B-cell; anti-CD22 antibodies conjugated with cytotoxic drug
        for treating cancer, carcinoma, sarcoma and B cell lymphoma/leukemia)
ΙT
     CD antigens
     RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (CD33; anti-CD22 antibodies conjugated with cytotoxic drug
     for treating cancer, carcinoma, sarcoma and B cell lymphoma/leukemia) Fatty acids, biological studies
TΤ
     RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (C6-18, salts as additive; anti-CD22 antibodies conjugated
        with cytotoxic drug for treating cancer, carcinoma, sarcoma and B cell
        lymphoma/leukemia)
     Anion exchange liquid chromatography
IT
        (FPLC or fast protein liquid chromatog.; anti-CD22 antibodies
        conjugated with cytotoxic drug for treating cancer, carcinoma,
        sarcoma and B cell lymphoma/leukemia)
IT
     Carbohydrates, biological studies
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
        (aldonic acids; anti-CD22 antibodies conjugated with
        cytotoxic drug for treating cancer, carcinoma, sarcoma and B cell
        lymphoma/leukemia)
     Carbohydrates, biological studies
ΙT
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (aldoses; anti-CD22 antibodies conjugated with cytotoxic drug
        for treating cancer, carcinoma, sarcoma and B cell lymphoma/leukemia)
     Carbohydrates, biological studies
IT
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (amino sugars; anti-CD22 antibodies conjugated with cytotoxic
        drug for treating cancer, carcinoma, sarcoma and B cell
        lymphoma/leukemia)
     Hormones, animal, biological studies
ΙT
     RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (antagonists; anti-CD22 antibodies conjugated with cytotoxic
        drug for treating cancer, carcinoma, sarcoma and B cell
        lymphoma/leukemia)
     Alkylating agents, biological
TΤ
     Antitumor agents
     Buffers
     Carcinoma
     Chromatography
     Combination chemotherapy
```

```
Cryoprotectants
     Cytotoxic agents
     DNA sequences
     Genetic engineering
     HPLC
     Human
     Hydrophobic interaction chromatography
     Liquid chromatographic stationary phases
     Molecular cloning
     Neoplasm
     Protein sequences
     Sarcoma
     Size-exclusion chromatography
     Solubilizers
     Surfactants
        (anti-CD22 antibodies conjugated with cytotoxic drug for
        treating cancer, carcinoma, sarcoma and B cell lymphoma/leukemia)
IT
     Antibodies and Immunoglobulins
     RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
     PRP (Properties); PUR (Purification or recovery); THU (Therapeutic use);
     BIOL (Biological study); PREP (Preparation); USES (Uses)
        (anti-CD22 antibodies conjugated with cytotoxic drug for
        treating cancer, carcinoma, sarcoma and B cell lymphoma/leukemia)
IT
    Alditols
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (anti-CD22 antibodies conjugated with cytotoxic drug for
        treating cancer, carcinoma, sarcoma and B cell lymphoma/leukemia)
IΤ
     CD19 (antigen)
     RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (anti-CD22 antibodies conjugated with cytotoxic drug for
        treating cancer, carcinoma, sarcoma and B cell lymphoma/leukemia)
TΤ
    CD20 (antigen)
     RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (anti-CD22 antibodies conjugated with cytotoxic drug for
        treating cancer, carcinoma, sarcoma and B cell lymphoma/leukemia)
TΤ
     CD22 (antigen)
     RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (anti-CD22 antibodies conjugated with cytotoxic drug for
        treating cancer, carcinoma, sarcoma and B cell lymphoma/leukemia)
ΙT
     Interferons
     RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (anti-CD22 antibodies conjugated with cytotoxic drug for
        treating cancer, carcinoma, sarcoma and B cell lymphoma/leukemia)
     Interleukin 2
IT
     RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (anti-CD22 antibodies conjugated with cytotoxic drug for
        treating cancer, carcinoma, sarcoma and B cell lymphoma/leukemia)
IΤ
     Interleukins
     RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (anti-CD22 antibodies conjugated with cytotoxic drug for
        treating cancer, carcinoma, sarcoma and B cell lymphoma/leukemia)
ΙT
     Tumor necrosis factors
```

```
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (anti-CD22 antibodies conjugated with cytotoxic drug for
        treating cancer, carcinoma, sarcoma and B cell lymphoma/leukemia)
ΙT
     Keratins
     Lactones
     Pentoses
     Polyoxyalkylenes, biological studies
     Uronic acids
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
        (anti-CD22 antibodies conjugated with cytotoxic drug for
        treating cancer, carcinoma, sarcoma and B cell lymphoma/leukemia)
ΙT
     Peptidomimetics
        (antibody; anti-CD22 antibodies conjugated with cytotoxic
        drug for treating cancer, carcinoma, sarcoma and B cell
        lymphoma/leukemia)
ΙT
    Linking agents
        (bifunctional or hydrolyzable; anti-CD22 antibodies conjugated
        with cytotoxic drug for treating cancer, carcinoma, sarcoma and B cell
        lymphoma/leukemia)
     Polymerization
IΤ
        (biochem., tubulin; inhibitors; anti-CD22 antibodies conjugated
        with cytotoxic drug for treating cancer, carcinoma, sarcoma and B cell
        lvmphoma/leukemia)
     Polymers, biological studies
IΤ
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (bulking agent; anti-CD22 antibodies conjugated with
        cytotoxic drug for treating cancer, carcinoma, sarcoma and B cell
        lymphoma/leukemia)
ΙT
    Reagents
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (bulking; anti-CD22 antibodies conjugated with cytotoxic drug
        for treating cancer, carcinoma, sarcoma and B cell lymphoma/leukemia)
     Antibodies and Immunoglobulins
ΙT
     RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
     PRP (Properties); PUR (Purification or recovery); THU (Therapeutic use);
     BIOL (Biological study); PREP (Preparation); USES (Uses)
        (chimeric; anti-CD22 antibodies conjugated with cytotoxic
        drug for treating cancer, carcinoma, sarcoma and B cell
        lymphoma/leukemia)
ΙT
     Estrogens
     RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (conjugated; anti-CD22 antibodies conjugated with
        cytotoxic drug for treating cancer, carcinoma, sarcoma and B cell
        lymphoma/leukemia)
     Antibodies and Immunoglobulins
     RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
     PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP
     (Preparation); USES (Uses)
        (conjugates; anti-CD22 antibodies conjugated with
        cytotoxic drug for treating cancer, carcinoma, sarcoma and B cell
        lymphoma/leukemia)
ΙT
     Androgens
       Corticosteroids, biological studies
     Growth factors, animal
```

```
Hormones, animal, biological studies
     Progestogens
     RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (conjugates; anti-CD22 antibodies conjugated with
        cytotoxic drug for treating cancer, carcinoma, sarcoma and B cell
        lymphoma/leukemia)
ΙT
     Drugs
        (cytotoxic; anti-CD22 antibodies conjugated with cytotoxic
        drug for treating cancer, carcinoma, sarcoma and B cell
        lymphoma/leukemia)
ΙT
     B cell (lymphocyte)
        (disease, malignancy; anti-CD22 antibodies conjugated with
        cytotoxic drug for treating cancer, carcinoma, sarcoma and B cell
        lymphoma/leukemia)
ΙT
     DNA
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (disruption; anti-CD22 antibodies conjugated with cytotoxic
        drug for treating cancer, carcinoma, sarcoma and B cell
        lymphoma/leukemia)
     Enzymes, biological studies
TΤ
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (engineering; anti-CD22 antibodies conjugated with cytotoxic
        drug for treating cancer, carcinoma, sarcoma and B cell
        lymphoma/leukemia)
ΙT
     Drug delivery systems
        (enteric; anti-CD22 antibodies conjugated with cytotoxic drug
        for treating cancer, carcinoma, sarcoma and B cell lymphoma/leukemia)
ΤТ
    Antibodies and Immunoglobulins
     RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
     PRP (Properties); PUR (Purification or recovery); THU (Therapeutic use);
     BIOL (Biological study); PREP (Preparation); USES (Uses)
        (fragments; anti-CD22 antibodies conjugated with cytotoxic
        drug for treating cancer, carcinoma, sarcoma and B cell
        lymphoma/leukemia)
     Drug delivery systems
ΙT
     Drug delivery systems
        (freeze-dried; anti-CD22 antibodies conjugated with cytotoxic
        drug for treating cancer, carcinoma, sarcoma and B cell
        lymphoma/leukemia)
    Antibodies and Immunoglobulins
ΤТ
     RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
     PRP (Properties); PUR (Purification or recovery); THU (Therapeutic use);
     BIOL (Biological study); PREP (Preparation); USES (Uses)
        (heavy chain; anti-CD22 antibodies conjugated with cytotoxic
        drug for treating cancer, carcinoma, sarcoma and B cell
        lymphoma/leukemia)
     Steroids, biological studies
IΤ
     RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (hormones; anti-CD22 antibodies conjugated with cytotoxic
        drug for treating cancer, carcinoma, sarcoma and B cell
        lymphoma/leukemia)
     Antibodies and Immunoglobulins
TΤ
     RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
     PRP (Properties); PUR (Purification or recovery); THU (Therapeutic use);
     BIOL (Biological study); PREP (Preparation); USES (Uses)
        (humanized; anti-CD22 antibodies conjugated with cytotoxic
```

```
drug for treating cancer, carcinoma, sarcoma and B cell
        lymphoma/leukemia)
ΙT
     Drug delivery systems
        (immunoconjugates; anti-CD22 antibodies conjugated with
        cytotoxic drug for treating cancer, carcinoma, sarcoma and B cell
        lymphoma/leukemia)
ΙT
     Translation, genetic
        (inhibitors; anti-CD22 antibodies conjugated with cytotoxic
        drug for treating cancer, carcinoma, sarcoma and B cell
        lymphoma/leukemia)
ΙT
     Drug delivery systems
        (injections, i.a.; anti-CD22 antibodies conjugated with
        cytotoxic drug for treating cancer, carcinoma, sarcoma and B cell
        lymphoma/leukemia)
IT
     Drug delivery systems
        (injections, i.p.; anti-CD22 antibodies conjugated with
        cytotoxic drug for treating cancer, carcinoma, sarcoma and B cell
        lymphoma/leukemia)
ΙT
     Drug delivery systems
        (injections, i.v.; anti-CD22 antibodies conjugated with
        cytotoxic drug for treating cancer, carcinoma, sarcoma and B cell
        lymphoma/leukemia)
ΙT
     Drug delivery systems
        (injections, s.c.; anti-CD22 antibodies conjugated with
        cytotoxic drug for treating cancer, carcinoma, sarcoma and B cell
        lymphoma/leukemia)
     Drug delivery systems
ΙT
        (intramedullar; anti-CD22 antibodies conjugated with
        cytotoxic drug for treating cancer, carcinoma, sarcoma and B cell
        lymphoma/leukemia)
IT
     Drug delivery systems
        (intrathecal; anti-CD22 antibodies conjugated with cytotoxic
        drug for treating cancer, carcinoma, sarcoma and B cell
        lymphoma/leukemia)
IT
     Monosaccharides
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (ketoses; anti-CD22 antibodies conjugated with cytotoxic drug
        for treating cancer, carcinoma, sarcoma and B cell lymphoma/leukemia)
     Antibodies and Immunoglobulins
IT
     RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
     PRP (Properties); PUR (Purification or recovery); THU (Therapeutic use);
     BIOL (Biological study); PREP (Preparation); USES (Uses)
        (light chain; anti-CD22 antibodies conjugated with cytotoxic
        drug for treating cancer, carcinoma, sarcoma and B cell
        lymphoma/leukemia)
ΙT
    Affinity
        (maturation; anti-CD22 antibodies conjugated with cytotoxic
        drug for treating cancer, carcinoma, sarcoma and B cell
        lymphoma/leukemia)
     Antibodies and Immunoglobulins
IT
     RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
     PRP (Properties); PUR (Purification or recovery); THU (Therapeutic use);
     BIOL (Biological study); PREP (Preparation); USES (Uses)
        (monoclonal; anti-CD22 antibodies conjugated with cytotoxic
        drug for treating cancer, carcinoma, sarcoma and B cell
        lymphoma/leukemia)
     Drug delivery systems
ΙT
        (nasal, intra-; anti-CD22 antibodies conjugated with
```

```
cytotoxic drug for treating cancer, carcinoma, sarcoma and B cell
        lymphoma/leukemia)
ΙT
    Lymphoma
        (non-Hodgkin's; anti-CD22 antibodies conjugated with
        cytotoxic drug for treating cancer, carcinoma, sarcoma and B cell
        lymphoma/leukemia)
ΙT
     Solvents
        (organic, co-; anti-CD22 antibodies conjugated with cytotoxic
        drug for treating cancer, carcinoma, sarcoma and B cell
        lymphoma/leukemia)
ΙT
     Tubulins
     RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (polymerization inhibitors; anti-CD22 antibodies conjugated with
        cytotoxic drug for treating cancer, carcinoma, sarcoma and B cell
        lymphoma/leukemia)
     Disease, animal
IT
        (proliferative; anti-CD22 antibodies conjugated with
        cytotoxic drug for treating cancer, carcinoma, sarcoma and B cell
        lymphoma/leukemia)
ΙT
     Drug delivery systems
        (rectal; anti-CD22 antibodies conjugated with cytotoxic drug
        for treating cancer, carcinoma, sarcoma and B cell lymphoma/leukemia)
ΙT
     Drug delivery systems
        (solns.; anti-CD22 antibodies conjugated with cytotoxic drug
        for treating cancer, carcinoma, sarcoma and B cell lymphoma/leukemia)
ΙT
     Drug delivery systems
        (sublingual; anti-CD22 antibodies conjugated with cytotoxic
        drug for treating cancer, carcinoma, sarcoma and B cell
        lymphoma/leukemia)
ΙT
    Animal cell
        (target; anti-CD22 antibodies conjugated with cytotoxic drug
        for treating cancer, carcinoma, sarcoma and B cell lymphoma/leukemia)
IT
     Drug delivery systems
        (topical; anti-CD22 antibodies conjugated with cytotoxic drug
        for treating cancer, carcinoma, sarcoma and B cell lymphoma/leukemia)
ΙT
     Drug delivery systems
        (transcutaneous; anti-CD22 antibodies conjugated with
        cytotoxic drug for treating cancer, carcinoma, sarcoma and B cell
        lymphoma/leukemia)
ΙT
     Drug delivery systems
        (transdermal; anti-CD22 antibodies conjugated with cytotoxic
        drug for treating cancer, carcinoma, sarcoma and B cell
        lymphoma/leukemia)
ΙT
     Drug delivery systems
        (vaginal; anti-CD22 antibodies conjugated with cytotoxic drug
        for treating cancer, carcinoma, sarcoma and B cell lymphoma/leukemia)
     635715-01-4, CMC 544
ΙT
     RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (CMC 544; anti-CD22 antibodies conjugated with cytotoxic drug
        for treating cancer, carcinoma, sarcoma and B cell lymphoma/leukemia)
     765780-67-4DP, humanized deivs. and conjugates
                                                      765831-50-3P
TT
     765831-51-4P
                    765831-53-6P
                                   765831-54-7P
                                                 765831-55-8P
                                                                 765831-56-9P
                    765831-58-1P
                                   765831-59-2P
                                                  765831-60-5DP, humanized
     765831-57-0P
     deivs. and conjugates
     RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
     PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP
     (Preparation); USES (Uses)
```

```
(amino acid sequence; anti-CD22 antibodies conjugated with
        cytotoxic drug for treating cancer, carcinoma, sarcoma and B cell
        lymphoma/leukemia)
ΙT
     124-07-2D, Octanoic acid, salts
                                      334-48-5D, Decanoic acid, salts
     65623-82-7D, 4-(4-Acetylphenoxy) butanoic acid, salts
     RL: BSU (Biological study, unclassified); MOA (Modifier or additive use);
     THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (anti-CD22 antibodies conjugated with cytotoxic drug for
        treating cancer, carcinoma, sarcoma and B cell lymphoma/leukemia)
                   369632-97-3
ΙT
                                 369632-98-4
                                               623141-79-7
     335197-32-5
                                                            623141-80-0
     623141-81-1
     RL: BSU (Biological study, unclassified); PRP (Properties); THU
     (Therapeutic use); BIOL (Biological study); USES (Uses)
        (anti-CD22 antibodies conjugated with cytotoxic drug for
        treating cancer, carcinoma, sarcoma and B cell lymphoma/leukemia)
ΙT
     50-02-2D, Dexamethasone, conjugates
                                          50-18-0D,
                                   50-91-9D, Floxuridine,
     Cyclophosphamide, conjugates
     conjugates
                  51-21-8D, Fluorouracil, derivs. and
                  51-75-2D, Mechlorethamine, conjugates
     conjugates
     52-24-4D, Thiotepa, conjugates 53-03-2D, Prednisone,
                                                     57-22-7D,
                  53-79-2D, Puromycin, conjugates
     conjugates
     Vincristine, conjugates 58-05-9D, Leucovorin,
                  59-05-2D, Methotrexate, conjugates
     conjugates
     59-14-3D, Broxuridine, conjugates 69-89-6D, Xanthine, derivs.
                      70-00-8D, Trifluridine, conjugates
     and conjugates
     83-43-2D, Methylprednisolone, conjugates 115-02-6D,
                                        147-94-4D, Cytarabine,
     Azaserine, derivs. and conjugates
                  305-03-3D, Chlorambucil, conjugates
     conjugates
     320-67-2D, Azacitidine, conjugates 671-16-9D, conjugates 865-21-4D, Vinblastine, conjugates
                                         671-16-9D, Procarbazine,
    1402-38-6D, Actinomycin, conjugates 1404-00-8D conjugates 1404-15-5D, Nogalamycin, conjugates
                                           1404-00-8D, Mitomycin,
     1605-68-1D, Taxane, derivs. and conjugates
                                                   2096-42-6D,
     Gougerotin, conjugates 2353-33-5D, Decitabine,
                  3094-09-5D, Doxifluridine, conjugates
     conjugates
     3778-73-2D, Ifosfamide, conjugates 4291-63-8D, Cladribine,
                  4342-03-4D, Dacarbazine, conjugates
     conjugates
     4803-27-4D, Anthramycin, conjugates 10540-29-1D, Tamoxifen,
                 11056-06-7D, Bleomycin, derivs. and
     conjugates
                  13010-47-4D, Lomustine, conjugates
     conjugates
                                         17902-23-7D, Tegafur,
     15663-27-1D, Cisplatin, conjugates
                  20830-81-3D, Daunorubicin, conjugates
     conjugates
     21679-14-1D, Fludarabine, conjugates 23214-92-8D, Doxorubicin,
                  25316-40-9D, Adriamycin, conjugates
     conjugates
     31698-14-3D, Ancitabine, conjugates
                                            33069-62-4D, Taxol,
     analogs and conjugates 33419-42-0D, Etoposide,
                  35846-53-8D, Maytansin, derivs.
                                                    41575-94-4D,
     conjugates
                              50935-04-1D, Carubicin,
     Carboplatin, conjugates
                  53910-25-1D, Pentostatin, conjugates
     conjugates
                                         55726-47-1D, Enocitabine,
     54083-22-6D, Zorubicin, conjugates
                  56124-62-0D, Valrubicin, conjugates
     conjugates
     56420-45-2D, Epirubicin, conjugates
                                           57576-44-0D, Aclarubicin,
                  58957-92-9D, Idarubicin, conjugates
     conjugates
     60084-10-8D, Tiazofurin, conjugates
                                            62683-29-8D,
     Colony-stimulating factor, conjugates 65271-80-9D,
     Mitoxantrone, conjugates 71628-96-1D, Menogaril,
                  79394-15-3D, Dolastatin 1, derivs. and
     conjugates
                  83869-56-1D, GM-CSF, conjugates
     conjugates
     95058-81-4D, Gemcitabine, conjugates
                                            108212-75-5D,
```

Page 33

```
Calicheamicin \gamma1, conjugates 108212-76-6D,
     N-Acetyl-\gamma-calicheamicin, conjugates 113440-58-7D,
     Calicheamicin, derivs and conjugates
                                                 114797-28-3D,
     Esperamicin, derivs. and conjugates
                                               138441-31-3D,
     conjugates 143011-72-7D, G-CSF, conjugates
     154361-50-9D, Capecitabine, conjugates 157207-90-4D,
     Hemiasterlin, derivs. and conjugates 160800-57-7D, Auristatin
     E, derivs. and conjugates 174722-31-7D, Rituximab,
     conjugates
     RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
         (anti-CD22 antibodies conjugated with cytotoxic drug for
         treating cancer, carcinoma, sarcoma and B cell lymphoma/leukemia)
     50-69-1, Ribose 50-70-4, Sorbitol, biological studies 50-81-7, Ascorbic acid, biological studies 50-99-7, Glucose, biological studies
ΙT
     56-81-5, Glycerol, biological studies 56-82-6D, Glyceraldehyde, derivs. 57-48-7, Fructose, biological studies 57-50-1, Sucrose, biological studies 58-86-6, Xylose, biological studies 59-23-4, Galactose,
     biological studies 63-42-3, Lactose 65-42-9, Lyxose 69-65-8, Mannitol 69-79-4, Maltose 77-86-1, Tromethamine 87-79-6, Sorbose
     87-89-8, Inositol 89-65-6, Isoascorbic acid 97-30-3, Methyl
                           99-20-7, Trehalose 107-21-1, Ethylene glycol,
     α-glucopyranoside
     biological studies 114-04-5, Neuraminic acid 115-77-5,
     Pentaerythritol, biological studies 147-81-9, Arabinose
                                                                        526-95-4,
                      551-84-8, Xylulose 685-73-4, Galacturonic acid
     Gluconic acid
     1398-61-4, Chitin 1758-51-6, Erythrose 2152-76-3, Idose
                                                                          3416-24-8,
                     3458-28-4, Mannose 5556-48-9, Ribulose 5987-68-8,
     Glucosamine
                6038-51-3, Allose 6556-12-3, Glucuronic acid 6814-36-4,
     Altrose
     Mannuronic acid 7535-00-4, Galactosamine 7647-14-5, Sodium chloride, biological studies 9000-07-1, Carrageenan 9000-69-5, Pectin
     9004-34-6, Cellulose, biological studies 9004-54-0, Dextran, biological
     studies 9004-61-9, Hyaluronic acid 9005-25-8,
                                                                 9005-65-6,
     Starch, biological studies 9005-32-7, Alginic acid
     Polysorbate 80 9005-79-2, Glycogen, biological studies 9005-82-7,
              9007-27-6, Chondroitin 9012-36-6, Agarose 9012-72-0, Glucan
     Amylose
     9013-95-0, Levan 9014-63-5D, Xylan, derivs. 9036-88-8D, Mannan,
                9037-22-3, Amylopectin 9037-55-2D, Galactan, derivs.
     9037-90-5D, Fructan, derivs. 9046-38-2D, Galacturonan, derivs.
     9046-40-6D, Pectic acid, derivs. 9057-02-7, Pullulan
                                                                    9060-75-7D,
     Arabinan, derivs. 9072-19-9, Fucoidan 11138-66-2, Xanthan gum
     17598-81-1, Tagatose 19163-87-2, Gulose 23140-52-5, Psicose 25322-68-3, Polyethylene glycol 25322-69-4, Polypropylene glycol
     25525-21-7, Glucaric acid 29884-64-8, Threose 30077-17-9, Talose 37331-28-5, Pustulan 40031-31-0, Erythrulose 60495-58-1,
                                                           71927-65-6, Heptose
     Galactocarolose
                         64612-25-5D, Fucan, derivs.
     75634-40-1, Dermatan 93780-23-5, Hexose
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
         (anti-CD22 antibodies conjugated with cytotoxic drug for
         treating cancer, carcinoma, sarcoma and B cell lymphoma/leukemia)
     65546-95-4, Sephacryl S-200 122985-81-3, Toyopearl 650M
ΙT
     Butyl Sepharose 4FF 204784-37-2, Octyl Sepharose 4 Fast Flow
     204784-38-3, Phenyl Sepharose 6 Fast Flow
                                                      507453-58-9, Macro-Prep
     t-Butyl 507453-59-0, Macro-Prep methyl
     RL: BUU (Biological use, unclassified); DEV (Device component use); BIOL
     (Biological study); USES (Uses)
         (anti-CD22 antibodies conjugated with cytotoxic drug for
         treating cancer, carcinoma, sarcoma and B cell lymphoma/leukemia)
     80449-02-1, Tyrosine kinase
IT
```

```
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (inhibitors; anti-CD22 antibodies conjugated with cytotoxic
        drug for treating cancer, carcinoma, sarcoma and B cell
        lymphoma/leukemia)
ΙT
     765831-49-0P
                    765831-52-5P
     RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
     PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP
     (Preparation); USES (Uses)
        (nucleotide sequence; anti-CD22 antibodies conjugated with
        cytotoxic drug for treating cancer, carcinoma, sarcoma and B cell
        lymphoma/leukemia)
                   765831-99-0
ΙT
     765831-98-9
                                  765832-00-6
                                                765832-01-7
                                                               765832-02-8
     765832-03-9
                   765832-04-0
                                  765832-05-1
                                                765832-06-2
                                                               765832-07-3
     765832-08-4
                   765832-09-5
                                  765832-10-8
                                                765832-11-9
                                                               765832-12-0
     765832-13-1
                   765832-14-2
                                  765832-15-3
                                                765832-16-4
                                                               765832-17-5
     RL: PRP (Properties)
        (unclaimed nucleotide sequence; anti-CD22 antibodies conjugated
        with cytotoxic drug for treating cancer, carcinoma, sarcoma and B cell
        lymphoma/leukemia)
ΙT
     765831-96-7
                   765831-97-8
     RL: PRP (Properties)
        (unclaimed protein sequence; anti-CD22 antibodies conjugated
        with cytotoxic drug for treating cancer, carcinoma, sarcoma and B cell
        lymphoma/leukemia)
ΙT
     145061-00-3
                   380648-61-3
                                  623141-82-2
                                                623141-83-3
                                                               623141-84-4
     623901-97-3
                   623901-98-4
                                  623901-99-5
                                                623902-00-1
                                                               623902-01-2
     RL: PRP (Properties)
        (unclaimed sequence; anti-CD22 antibodies conjugated with
        cytotoxic drug for treating cancer, carcinoma, sarcoma and B cell
        lymphoma/leukemia)
IT
     50-02-2D, Dexamethasone, conjugates 53-03-2D,
     Prednisone, conjugates 83-43-2D, Methylprednisolone,
     conjugates
     RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (anti-CD22 antibodies conjugated with cytotoxic drug for
        treating cancer, carcinoma, sarcoma and B cell lymphoma/leukemia)
RN
     50-02-2 HCAPLUS
     Pregna-1, 4-diene-3, 20-dione, 9-fluoro-11, 17, 21-trihydroxy-16-methyl-,
CN
     (11\beta, 16\alpha) - (9CI) (CA INDEX NAME)
```

Absolute stereochemistry.

RN 53-03-2 HCAPLUS CN Pregna-1,4-diene-3,11,20-trione, 17,21-dihydroxy- (8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 83-43-2 HCAPLUS

CN Pregna-1,4-diene-3,20-dione, 11,17,21-trihydroxy-6-methyl-,  $(6\alpha,11\beta)$ - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

### IT 9004-61-9, Hyaluronic acid

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(anti-CD22 antibodies conjugated with cytotoxic drug for

treating cancer, carcinoma, sarcoma and B cell lymphoma/leukemia)

RN 9004-61-9 HCAPLUS

CN Hyaluronic acid (8CI, 9CI) (CA INDEX NAME)

# \*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

L46 ANSWER 5 OF 65 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2004:182656 HCAPLUS

DN 140:193853

ED Entered STN: 05 Mar 2004

TI Preparation of corticosteroid conjugates and therapeutic uses thereof as anti-inflammatory agents

IN Teicher, Martin H.; Andersen-Navalta, Susan L.

PA The McLean Hospital Corporation, USA

SO PCT Int. Appl., 40 pp.

CODEN: PIXXD2

DT Patent

```
English
LA
IC
      ICM A61K
      2-4 (Mammalian Hormones)
CC
      Section cross-reference(s): 32
FAN.CNT 1
                               KIND
                                                   APPLICATION NO. DATE
      PATENT NO.
                                         DATE
                                ____
                                         _____
                                                         _____
      WO 2004017904 A2 20040304 WO 2003-US26233 20030822
PΙ
           2004017904

A2 20040304 WO 2003-US26233 20030822
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
                               A1
P
                                         20040812 US 2003-646063
      US 2004157810
                                                                                     20030822
PRAI US 2002-405688P
                                         20020823
CLASS
 PATENT NO. CLASS PATENT FAMILY CLASSIFICATION CODES
 WO 2004017904 ICM
                              A61K
      MARPAT 140:193853
      The invention features corticosteroids conjugated to
AΒ
      either a charged group or a bulky group in a manner that resists
      in vivo cleavage, the resulting conjugate is a peripherally
      acting steroid with reduced activity in the central
      nervous system. The invention provides a method for
      treating a patient having an inflammatory disease by
      administering to the patient a corticosteroid conjugate
ST
      corticosteroid conjugate synthesis
      antiinflammatory autoimmune disease
      Cations
IT
          (-derived corticosteroid; preparation of corticosteroid
          conjugates and therapeutic uses thereof as anti-
          inflammatory agents)
ΙT
      Glycoproteins
      Peptides, reactions
      Polymers, reactions
      Polyoxyalkylenes, reactions
      Polysaccharides, reactions
         \alpha 1-Acid glycoprotein
      RL: RCT (Reactant); RACT (Reactant or reagent)
          (-derived corticosteroid; preparation of corticosteroid
          conjugates and therapeutic uses thereof as anti-
          inflammatory agents)
      Intestine, disease
ΙT
          (Crohn's; preparation of corticosteroid conjugates and
          therapeutic uses thereof as anti-inflammatory agents)
ΙT
      Kidney, disease
          (Goodpasture's syndrome; preparation of corticosteroid
          conjugates and therapeutic uses thereof as anti-
          inflammatory agents)
      Blood vessel, disease
ΙT
          (Raynaud's phenomenon; preparation of corticosteroid
          conjugates and therapeutic uses thereof as anti-
```

```
inflammatory agents)
ΙT
     Respiratory distress syndrome
        (adult; preparation of corticosteroid conjugates and
        therapeutic uses thereof as anti-inflammatory agents)
ΙT
     Anemia (disease)
        (autoimmune hemolytic anemia; preparation of corticosteroid
        conjugates and therapeutic uses thereof as anti-
        inflammatory agents)
ΙT
     Thyroid gland, disease
        (autoimmune thyroiditis; preparation of corticosteroid
        conjugates and therapeutic uses thereof as anti-
        inflammatory agents)
IT
    Nervous system
        (central, reduced activity of the corticosteroid
        derivative in; preparation of corticosteroid conjugates and
        therapeutic uses thereof as anti-inflammatory agents)
     Corticosteroids, biological studies
ΤТ
     RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological
     activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL
     (Biological study); PREP (Preparation); USES (Uses)
        (conjugates and derivs.; preparation of corticosteroid
        conjugates and therapeutic uses thereof as anti-
        inflammatory agents)
ΤТ
    Liver
        (corticosteroid conjugates-induced tyrosine
        aminotransferase activity; preparation of corticosteroid
        conjugates and therapeutic uses thereof as anti-
        inflammatory agents)
ΙT
    Tendon
        (disease, tendinitis; preparation of corticosteroid
        conjugates and therapeutic uses thereof as anti-
        inflammatory agents)
ΙT
     Thymus gland
        (effect of corticosteroid conjugates treatment on;
        preparation of corticosteroid conjugates and therapeutic
        uses thereof as anti-inflammatory agents)
IT
     Intestine, disease
        (enterocolitis, necrotizing; preparation of corticosteroid
        conjugates and therapeutic uses thereof as anti-
        inflammatory agents)
ΙT
     Kidney, disease
        (glomerulonephritis; preparation of corticosteroid
        conjugates and therapeutic uses thereof as anti-
        inflammatory agents)
     Transplant and Transplantation
IT
        (graft-vs.-host reaction; preparation of corticosteroid
        conjugates and therapeutic uses thereof as anti-
        inflammatory agents)
ΙT
    Liver
        (hepatocyte, corticosteroid conjugates-induced
        tyrosine aminotransferase activity; preparation of corticosteroid
        conjugates and therapeutic uses thereof as anti-
        inflammatory agents)
ΙT
    Lung, disease
        (hypersensitivity pneumonitis; preparation of corticosteroid
        conjugates and therapeutic uses thereof as anti-
        inflammatory agents)
ΙT
    Addison's disease
        (idiopathic; preparation of corticosteroid conjugates
```

```
and therapeutic uses thereof as anti-inflammatory agents)
IT
     Blood-brain barrier
        (inhibited passage of corticosteroid conjugate;
        preparation of corticosteroid conjugates and therapeutic
        uses thereof as anti-inflammatory agents)
ΙT
     Diabetes mellitus
        (insulin-dependent; preparation of corticosteroid
        conjugates and therapeutic uses thereof as anti-
        inflammatory agents)
     Connective tissue, disease
TT
        (mixed connective tissue disease; preparation of corticosteroid
        conjugates and therapeutic uses thereof as anti-
        inflammatory agents)
ΙT
     Toxicity
        (neurotoxicity, corticosteroid conjugates-induced;
        preparation of corticosteroid conjugates and therapeutic
       uses thereof as anti-inflammatory agents)
ΙT
     Toxicity
        (oxygen; preparation of corticosteroid conjugates and
        therapeutic uses thereof as anti-inflammatory agents)
TΤ
     Biological transport
        (permeation, blood-brain barrier, inhibited passage of
        corticosteroid conjugate; preparation of
        corticosteroid conjugates and therapeutic uses
        thereof as anti-inflammatory agents)
IΤ
    Anions
        (polyvalent, -derived corticosteroid; preparation of
        corticosteroid conjugates and therapeutic uses
        thereof as anti-inflammatory agents)
ΤТ
    Anti-inflammatory agents
     Antiarthritics
    Antiasthmatics
    Antidiabetic agents
    Antirheumatic agents
    Asthma
    Autoimmune disease
     Dermatitis
     Eczema
    Encephalomyelitis
    Graves' disease
    Human
      Inflammation
    Lupus erythematosus
    Meningitis
    Multiple sclerosis
     Psoriasis
     Rheumatoid arthritis
     Shock (circulatory collapse)
     Sjogren's syndrome
     Skin preparations (pharmaceutical)
     Transplant rejection
     Urticaria
        (preparation of corticosteroid conjugates and
        therapeutic uses thereof as anti-inflammatory agents)
TΤ
        (reactive; preparation of corticosteroid conjugates and
       therapeutic uses thereof as anti-inflammatory agents)
     Purpura (disease)
IΤ
        (thrombocytopenic, autoimmune; preparation of corticosteroid
```

```
conjugates and therapeutic uses thereof as anti-
        inflammatory agents)
ΙT
     Nerve
        (toxicity, corticosteroid conjugates-induced;
        preparation of corticosteroid conjugates and therapeutic
        uses thereof as anti-inflammatory agents)
ΙT
     Intestine, disease
        (ulcerative colitis; preparation of corticosteroid
        conjugates and therapeutic uses thereof as anti-
        inflammatory agents)
ΙT
     Eye, disease
        (uveitis; preparation of corticosteroid conjugates and
        therapeutic uses thereof as anti-inflammatory agents)
ΙT
     Blood vessel, disease
        (vasculitis; preparation of corticosteroid conjugates
        and therapeutic uses thereof as anti-inflammatory agents)
ΙT
     9004-61-9, Hyaluronic acid
                                 25322-68-3, Polyethylene
     glycol
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (-derived corticosteroid; preparation of corticosteroid
        conjugates and therapeutic uses thereof as anti-
        inflammatory agents)
     9014-55-5, Tyrosine aminotransferase
ΙT
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (liver activity, corticosteroid conjugates-induce;
        preparation of corticosteroid conjugates and therapeutic
        uses thereof as anti-inflammatory agents)
ΙT
     50-24-8DP, Prednisolone, C21 and polyguanidine peptoid derivs.
     124-94-7DP, Triamcinolone, C16-C17 cyclic acetals and
     hyaluronic acid conjugates 51333-22-3DP,
     Budesonide, mPEG conjugates 663178-13-0P
     663178-15-2P 663178-16-3P
     RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological
     activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL
     (Biological study); PREP (Preparation); USES (Uses)
        (preparation of corticosteroid conjugates and
        therapeutic uses thereof as anti-inflammatory agents)
ΙT
     35410-28-7 105702-59-8
     RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological
     activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (preparation of corticosteroid conjugates and
        therapeutic uses thereof as anti-inflammatory agents)
                             108-24-7, Acetic anhydride
TΤ
     50-24-8, Prednisolone
     124-94-7, Triamcinolone
                               144-62-7, Oxalic acid, reactions
     693-23-2D, 1,10-Decanedicarboxylic acid, bis activated ester
                                                                     4023-02-3,
     1H-Pyrazole-1-carboxamidine hydrochloride 4419-39-0,
     Beclomethasone 51333-22-3, Budesonide 115446-51-0
     152120-54-2, 1H-Pyrazole-1-[N,N'-bis(tert-butoxycarbonyl)carboxamidine]
     152120-55-3
                   174569-25-6
                                 663178-12-9
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (preparation of corticosteroid conjugates and
        therapeutic uses thereof as anti-inflammatory agents)
IT
     663178-14-1P
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (preparation of corticosteroid conjugates and
        therapeutic uses thereof as anti-inflammatory agents)
     50-22-6, Corticosterone
TT
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
```

(suppression following treatment; preparation of corticosteroid conjugates and therapeutic uses thereof as antiinflammatory agents) ΙT 7782-44-7, Oxygen, biological studies RL: BSU (Biological study, unclassified); BIOL (Biological study) (toxicity; preparation of corticosteroid conjugates and therapeutic uses thereof as anti-inflammatory agents) IT9004-61-9, Hyaluronic acid RL: RCT (Reactant); RACT (Reactant or reagent) (-derived corticosteroid; preparation of corticosteroid conjugates and therapeutic uses thereof as antiinflammatory agents) 9004-61-9 HCAPLUS RN CN Hyaluronic acid (8CI, 9CI) (CA INDEX NAME) \*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\* 50-24-8DP, Prednisolone, C21 and polyguanidine peptoid derivs. 124-94-7DP, Triamcinolone, C16-C17 cyclic acetals and hyaluronic acid conjugates 51333-22-3DP, Budesonide, mPEG conjugates 663178-13-0P 663178-15-2P 663178-16-3P RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of corticosteroid conjugates and therapeutic uses thereof as anti-inflammatory agents) RN 50-24-8 HCAPLUS

Pregna-1, 4-diene-3, 20-dione, 11, 17, 21-trihydroxy-,  $(11\beta)$ - (9CI)

Absolute stereochemistry.

INDEX NAME)

CN

RN 124-94-7 HCAPLUS CN Pregna-1,4-diene-3,20-dione, 9-fluoro-11,16,17,21-tetrahydroxy-,  $(11\beta,16\alpha)$ - (9CI) (CA INDEX NAME)

RN 51333-22-3 HCAPLUS

CN Pregna-1, 4-diene-3, 20-dione, 16, 17-[butylidenebis(oxy)]-11, 21-dihydroxy-,  $(11\beta, 16\alpha)$ - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 663178-13-0 HCAPLUS

Glycinamide, N-[(11β)-11,17-dihydroxy-3,20-dioxopregna-1,4-dien-21-yl]-2-oxoglycyl-6-aminohexanoyl-N-[6-[(aminoiminomethyl)amino]hexyl]glycyl-N-[6-[(aminoiminomethyl)amino]hexyl]glycyl-N-[6-[(aminoiminomethyl)amino]hexyl]glycyl-N-[6-[(aminoiminomethyl)amino]hexyl]glycyl-N-[6-[(aminoiminomethyl)amino]hexyl]glycyl-N-[6-[(aminoiminomethyl)amino]hexyl]glycyl-N-[6-[(aminoiminomethyl)amino]hexyl]glycyl-N-[6-[(aminoiminomethyl)amino]hexyl]glycyl-N2-[6-[(aminoiminomethyl)amino]hexyl]- (9CI) (CA INDEX NAME)

PAGE 1-B

PAGE 2-A

PAGE 3-A

PAGE 4-A

RN 663178-15-2 HCAPLUS

CN Dodecanediamide, N, N'-bis[(11β,16β)-9-chloro-11,17-dihydroxy-16-methyl-3,20-dioxopregna-1,4-dien-21-yl]- (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 2-A

RN 663178-16-3 HCAPLUS

CN Guanidine, [ $(11\beta,16\alpha)$ -9-fluoro-11,17-dihydroxy-16-methyl-3,20-dioxopregna-1,4-dien-21-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT 35410-28-7 105702-59-8

RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological

Absolute stereochemistry.

RN 105702-59-8 HCAPLUS

CN Pregna-1, 4-diene-3, 20-dione, 9-chloro-11, 17-dihydroxy-16-methyl-21- [(methylsulfonyl)oxy]-,  $(11\beta, 16\beta)$ - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 50-24-8 HCAPLUS

CN Pregna-1,4-diene-3,20-dione, 11,17,21-trihydroxy-, (11β)- (9CI) (CA INDEX NAME)

RN 124-94-7 HCAPLUS CN Pregna-1,4-diene-3,20-dione, 9-fluoro-11,16,17,21-tetrahydroxy-,  $(11\beta,16\alpha)$ - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 4419-39-0 HCAPLUS CN Pregna-1,4-diene-3,20-dione, 9-chloro-11,17,21-trihydroxy-16-methyl-,  $(11\beta,16\beta)$ - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 51333-22-3 HCAPLUS CN Pregna-1,4-diene-3,20-dione, 16,17-[butylidenebis(oxy)]-11,21-dihydroxy-,  $(11\beta,16\alpha)$ - (9CI) (CA INDEX NAME)

RN 115446-51-0 HCAPLUS

CN Pregna-1, 4-diene-3, 20-dione, 21-amino-9-fluoro-11, 17-dihydroxy-16-methyl-,  $(11\beta, 16\alpha)$ - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

# IT 663178-14-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

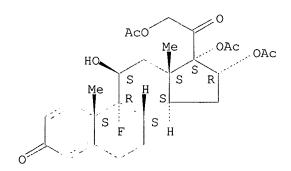
(preparation of corticosteroid conjugates and

therapeutic uses thereof as anti-inflammatory agents)

RN 663178-14-1 HCAPLUS

CN Pregna-1,4-diene-3,20-dione, 16,17,21-tris(acetyloxy)-9-fluoro-11-hydroxy-,  $(11\beta,16\alpha)$ - (9CI) (CA INDEX NAME)

Absolute stereochemistry.



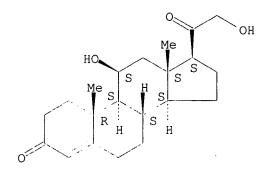
# IT 50-22-6, Corticosterone

RL: BSU (Biological study, unclassified); BIOL (Biological study) (suppression following treatment; preparation of corticosteroid conjugates and therapeutic uses thereof as antiinflammatory agents)

50-22-6 HCAPLUS RN

Pregn-4-ene-3,20-dione, 11,21-dihydroxy-, (11β)- (9CI) (CA INDEX CN NAME)

Absolute stereochemistry.



ANSWER 6 OF 65 HCAPLUS COPYRIGHT 2004 ACS on STN L46

2004:182368 HCAPLUS ΑN

140:229401 DN

Entered STN: 05 Mar 2004 ED

TIThree hybrid assay system for isolating ligand-binding polypeptides and for isolating small mol. ligands

Come, Jon H.; Becker, Frank; Kley, Nikolai A.; Reichel, Christoph ΙN

PA USA

U.S. Pat. Appl. Publ., 238 pp., Cont.-in-part of U.S. Ser. No. 91,177. SO CODEN: USXXCO

DT Patent

English LA

ICM C12Q001-68 IC

ICS G01N033-53; C07H021-04

435006000; 435007100; 536023100; 530350000; 552653000; 552500000; NCL

536123000; 546001000; 540200000; 530317000

CC 1-1 (Pharmacology)

Section cross-reference(s): 9, 28

FAN.CNT 3				
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 2004043388	A1	20040304	US 2002-234985	20020903
US 2003165873 PRAI US 2001-272932	A1 P	20030904 20010302	US 2002-91177	20020304
US 2001-278233 US 2001-329437		20010323 20011015		
US 2002-91177 CLASS	A2	20020304		
	ASS PATENT	FAMILY CLAS	SIFICATION CODES	
US 2004043388 ICI	G01N03	3-53; C07H02		
NC:			00; 536023100; 530350 00; 546001000; 540200	•
US 2004043388 EC	LA C07D23	1/54; C07D48	7/04+239B+231B; C07F0	009/6558B;

## C07F009/6561; G01N033/68A10

- AB The invention provides compns. and methods for isolating ligand-binding polypeptides for a user-specified ligand, and for isolating small mol. ligands for a user-specified target polypeptide using an improved class of hybrid ligand compds. Preparation of compds., e.g a methotrexate moiety linked by a polyethylene gycol moiety to dexamethasone, is described.
- ST three hybrid assay system ligand polypeptide; methotrexate dexamethasone conjugate prepn three hybrid assay system
- IT Proteins
  - RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
  - (55,000-mol.-weight; three hybrid assay system for isolating ligand-binding polypeptides and for isolating small mol. ligands) Gene, microbial
- IT Gene, microbial RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
  - (ADE2, reporter gene; three hybrid assay system for isolating ligand-binding polypeptides and for isolating small mol. ligands)
- IT Gene, microbial
   RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL
   (Biological study); USES (Uses)
  - (CAN1, reporter gene; three hybrid assay system for isolating ligand-binding polypeptides and for isolating small mol. ligands) Peptides, biological studies
- IT Peptides, biological studies RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
  - (CBD tag; three hybrid assay system for isolating ligand-binding polypeptides and for isolating small mol. ligands)
- IT Gene, microbial
  - RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
  - (CYH1, reporter gene; three hybrid assay system for isolating ligand-binding polypeptides and for isolating small mol. ligands) Cyclins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (D1; three hybrid assay system for isolating ligand-binding polypeptides and for isolating small mol. ligands)
- IT DNA

ΙT

- RL: BSU (Biological study, unclassified); BIOL (Biological study) (DNA binding domain; three hybrid assay system for isolating ligand-binding polypeptides and for isolating small mol. ligands)
- IT Peptides, biological studies
   RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL
   (Biological study); USES (Uses)
  - (E tag; three hybrid assay system for isolating ligand-binding polypeptides and for isolating small mol. ligands)
- IT Cyclins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (E; three hybrid assay system for isolating ligand-binding polypeptides and for isolating small mol. ligands)
- IT Immunophilins
  - RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
    - (FKBP-12 (FK 506-binding protein, 12 kDa), fusion protein including domain of; three hybrid assay system for isolating ligand-binding polypeptides and for isolating small mol. ligands)
- Transcription factors
  RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL
  (Biological study); USES (Uses)

```
(GAL4; three hybrid assay system for isolating ligand-binding
        polypeptides and for isolating small mol. ligands)
ΙT
     Proteins
     RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (GyrB, fusion protein including domain of; three hybrid assay system
        for isolating ligand-binding polypeptides and for isolating small mol.
        ligands)
IT
     Proteins
     RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (H-1; three hybrid assay system for isolating ligand-binding
        polypeptides and for isolating small mol. ligands)
     Gene, microbial
ΙT
     RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (HIS3, reporter gene; three hybrid assay system for isolating
        ligand-binding polypeptides and for isolating small mol. ligands)
ΙT
     Gene, microbial
     RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (LEU2, reporter gene; three hybrid assay system for isolating
        ligand-binding polypeptides and for isolating small mol. ligands)
IT
     Gene, microbial
     RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (LYS2, reporter gene; three hybrid assay system for isolating
        ligand-binding polypeptides and for isolating small mol. ligands)
ΙT
     Proteins
     RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (MBP (maltose-binding protein), fusion protein including domain of;
        three hybrid assay system for isolating ligand-binding polypeptides and
        for isolating small mol. ligands)
ΙT
     Peptides, biological studies
     RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (Myc tag; three hybrid assay system for isolating ligand-binding
        polypeptides and for isolating small mol. ligands)
ΙT
     Proteins
     RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (PLV, conjugates; three hybrid assay system for isolating
        ligand-binding polypeptides and for isolating small mol. ligands)
     Peptides, biological studies
     RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (S tag; three hybrid assay system for isolating ligand-binding
        polypeptides and for isolating small mol. ligands)
ΙT
     Peptides, biological studies
     RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (T7 tag; three hybrid assay system for isolating ligand-binding
        polypeptides and for isolating small mol. ligands)
TT
     Gene, microbial
     RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (TRP1, reporter gene; three hybrid assay system for isolating
        ligand-binding polypeptides and for isolating small mol. ligands)
```

```
IT
     Gene, microbial
     RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (TRP2, reporter gene; three hybrid assay system for isolating
        ligand-binding polypeptides and for isolating small mol. ligands)
ΙT
     Peptides, biological studies
     RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (Tag 100; three hybrid assay system for isolating ligand-binding
        polypeptides and for isolating small mol. ligands)
ΙT
     Proteins
     RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (Tet-R, fusion protein including domain of; three hybrid assay system
        for isolating ligand-binding polypeptides and for isolating small mol.
        ligands)
IT
     Proteins
     RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (URA3, conjugates; three hybrid assay system for isolating
        ligand-binding polypeptides and for isolating small mol. ligands)
IT
    Gene, microbial
     RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (URA3, reporter gene; three hybrid assay system for isolating
        ligand-binding polypeptides and for isolating small mol. ligands)
     Peptides, biological studies
ΙT
     RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (V5 tag; three hybrid assay system for isolating ligand-binding
        polypeptides and for isolating small mol. ligands)
     Peptides, biological studies
TT
     RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (VSV tag; three hybrid assay system for isolating ligand-binding
        polypeptides and for isolating small mol. ligands)
ΙT
     Peptides, biological studies
     RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (Xpress tag; three hybrid assay system for isolating ligand-binding
        polypeptides and for isolating small mol. ligands)
     Transcriptional regulation
IT
        (activation, transcriptional activation domain; three hybrid assay
        system for isolating ligand-binding polypeptides and for isolating
        small mol. ligands)
ΙT
    Genomic library
        (bacterial or eukaryotic genomic DNA fragment library; three hybrid
        assay system for isolating ligand-binding polypeptides and for
        isolating small mol. ligands)
     Peptides, biological studies
ΙT
     RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (calmodulin binding peptide tag; three hybrid assay system for
        isolating ligand-binding polypeptides and for isolating small mol.
        ligands)
TT
     Gene, microbial
     RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (cat, reporter gene; three hybrid assay system for isolating
```

```
ligand-binding polypeptides and for isolating small mol. ligands)
ΙT
     Estrogens
     Ligands
     RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (conjugated; three hybrid assay system for isolating
        ligand-binding polypeptides and for isolating small mol. ligands)
ΙT
     Acid halides
     Alcohols, biological studies
     Aldehydes, biological studies
Alkaloids, biological studies
     Alkanes, biological studies Alkenes, biological studies
     Alkyl halides
     Alkynes
     Amides, biological studies
     Amine oxides
     Amines, biological studies
     Amino acids, biological studies
     Anhydrides
     Aromatic hydrocarbons, biological studies
     Aryl halides
     Cannabinoids
     Carboxylic acids, biological studies
     Cyanohydrins
     Enamines
     Enzymes, biological studies
     Esters, biological studies
     Ethers, biological studies
     Imines
     Lipids, biological studies
     Nitriles, biological studies
     Nucleic acids
     Nucleosides, biological studies
Nucleotides, biological studies
     Organometallic compounds
     Peptides, biological studies
     Polysaccharides, biological studies
     Prostaglandins
     Proteins
     Quaternary ammonium compounds, biological studies
     Steroids, biological studies
     Transcription factors
     RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (conjugates; three hybrid assay system for isolating
        ligand-binding polypeptides and for isolating small mol. ligands)
     Sulfonic acids, biological studies
IΤ
     RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (esters, conjugates; three hybrid assay system for isolating
        ligand-binding polypeptides and for isolating small mol. ligands)
ΙT
        (extract; three hybrid assay system for isolating ligand-binding
        polypeptides and for isolating small mol. ligands)
TΤ
     Proteins
     RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (fluorescent, conjugates; three hybrid assay system for
```

### Cordero-Garcia PCT/US03/26233

```
isolating ligand-binding polypeptides and for isolating small mol.
        ligands)
     Androgen receptors
ΙT
     Cannabinoid receptors
     Estrogen receptors
     Glucocorticoid receptors
     Progesterone receptors
     Retinoic acid receptors
     Steroid receptors
     Vitamin D receptors
     RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (fusion protein including domain of; three hybrid assay system for
        isolating ligand-binding polypeptides and for isolating small mol.
        ligands)
TΤ
     Gene, microbial
     RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (qfp, reporter gene; three hybrid assay system for isolating
        ligand-binding polypeptides and for isolating small mol. ligands)
ΙT
     RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (green fluorescent, conjugates; three hybrid assay system for
        isolating ligand-binding polypeptides and for isolating small mol.
        ligands)
IT
     Analysis
        (halo growth assay; three hybrid assay system for isolating
        ligand-binding polypeptides and for isolating small mol. ligands)
ΙT
     Aldehydes, biological studies
     RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (hydroxy, conjugates; three hybrid assay system for isolating
        ligand-binding polypeptides and for isolating small mol. ligands)
ΙT
     Peptides, biological studies
     RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (intein/chitin binding domain tag; three hybrid assay system for
        isolating ligand-binding polypeptides and for isolating small mol.
        ligands)
IT
     Gene, microbial
     RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (lacZ, reporter gene; three hybrid assay system for isolating
        ligand-binding polypeptides and for isolating small mol. ligands)
IΤ
     Transcription factors
     RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (lactose repressors; three hybrid assay system for isolating
        ligand-binding polypeptides and for isolating small mol. ligands)
ΙT
     Oligonucleotides
     RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (library; three hybrid assay system for isolating ligand-binding
        polypeptides and for isolating small mol. ligands)
IT
     Structure-activity relationship
        (ligand-binding; three hybrid assay system for isolating ligand-binding
        polypeptides and for isolating small mol. ligands)
IT
     Proteins
```

### Cordero-Garcia PCT/US03/26233

```
RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (ligand-binding; three hybrid assay system for isolating ligand-binding
        polypeptides and for isolating small mol. ligands)
    Microtiter plates
TΤ
        (microtiter plate growth assay; three hybrid assay system for isolating
        ligand-binding polypeptides and for isolating small mol. ligands)
TΤ
     Proteins
     RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (phi-29 terminal protein; three hybrid assay system for isolating
        ligand-binding polypeptides and for isolating small mol. ligands)
ΙT
     DNA formation factors
     RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (rep; three hybrid assay system for isolating ligand-binding
        polypeptides and for isolating small mol. ligands)
ΙT
     Hemagglutinins
     Thioredoxins
     RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (tag; three hybrid assay system for isolating ligand-binding
        polypeptides and for isolating small mol. ligands)
ΙT
     Drug screening
     Fluorometry
     Immobilization, molecular or cellular
     Linking agents
     Molecular association
     Protein motifs
     Surface plasmon resonance
     cDNA library
        (three hybrid assay system for isolating ligand-binding polypeptides
        and for isolating small mol. ligands)
ΙT
     Chimeric gene
     Fusion proteins (chimeric proteins)
     Glycoconjugates
     Polynucleotides
     Reporter gene
     RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (three hybrid assay system for isolating ligand-binding polypeptides
        and for isolating small mol. ligands)
     Lactams
ΙT
     RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (β-, antibiotics, conjugates; three hybrid assay system
        for isolating ligand-binding polypeptides and for isolating small mol.
        ligands)
ΙT
     Antibiotics
        (\beta-lactam, conjugates; three hybrid assay system for
        isolating ligand-binding polypeptides and for isolating small mol.
        ligands)
ΙT
     9002-03-3, Dihydrofolate reductase
                                           9073-60-3, \beta-Lactamase
     50812-37-8, Glutathione-S-transferase
     RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (fusion protein including domain of; three hybrid assay system for
        isolating ligand-binding polypeptides and for isolating small mol.
        ligands)
```

```
ΙT
     9002-88-4, Polyethylene
     RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (linker; three hybrid assay system for isolating ligand-binding
        polypeptides and for isolating small mol. ligands)
ΙT
     60267-61-0, Ubiquitin
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (subdomain; three hybrid assay system for isolating ligand-binding
        polypeptides and for isolating small mol. ligands)
                         109136-49-4, Ubiquitin-specific protease
TΤ
     9031-44-1, Kinase
     141349-86-2, Cdk2 kinase
                                147014-97-9, Cdk4 kinase
                                                           150428-23-2,
     Cyclin-dependent kinase
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (three hybrid assay system for isolating ligand-binding polypeptides
        and for isolating small mol. ligands)
ΙT
     454221-45-5P
                    454221-46-6P
                                 454221-47-7P
                                                                 666839-17-4P
                                                  454221-48-8P
     668481-63-8P, GPC 285985
     RL: BUU (Biological use, unclassified); SPN (Synthetic preparation); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
     (Uses)
        (three hybrid assay system for isolating ligand-binding polypeptides
        and for isolating small mol. ligands)
ΤТ
     50-02-2D, Dexamethasone, conjugates 53-06-5D,
     Cortisone, conjugates 57-83-0D, Progesterone,
                                     58-22-0D, Testosterone,
     conjugates, biological studies
                  58-85-5D, Biotin, conjugates
                                                 59-05-2D,
     conjugates
                                60-54-8D, Tetracycline,
    Methotrexate, conjugates
                  69-79-4D, Maltose, conjugates
                                                 70-18-8D,
     conjugates
                             108-95-2D, Phenol, conjugates
     Glutathione, conjugates
     129-56-6D, Anthra[1,9-cd]pyrazol-6(2H)-one, conjugates
     302-79-4D, Retinoic acid, conjugates
                                            303-81-1D, Novobiocin,
                                          938-55-6D,
                  446-72-0D, conjugates
     conjugates
                  1127-93-1D, 2,4-Diaminopteridine, conjugates
     conjugates
     1406-16-2D, Vitamin D, conjugates
                                         2365-40-4D,
                  3768-14-7D, conjugates
     conjugates
                                           5812-07-7D,
                  7440-02-0D, Nickel, conjugates
     conjugates
     7440-43-9D, Cadmium, organocadmium compound conjugates
                              34708-97-9D, conjugates
     16036-15-0D, conjugates
                               53123-88-9D, Rapamycin,
     52837-55-5D, conjugates
                  54714-78-2D, conjugates
     conjugates
                                            56767-20-5D,
                  60868-76-0D, conjugates
                                            64134-30-1,
     conjugates
                     72873-74-6D, conjugates
                                              75706-12-6D,
     Hexahistidine
                  79217-60-0D, Cyclosporin, conjugates
     conjugates
                               97620-17-2D, conjugates
     88404-44-8D, conjugates
                  101622-51-9D, conjugates
                                             103745-39-7D,
     98849-88-8
                  104987-11-3D, Fk506, conjugates
     conjugates
                                106035-95-4D, conjugates
     105628-72-6D, conjugates
     107761-24-0D, conjugates
                                108402-27-3D, conjugates
     109511-58-2D, conjugates
                                109887-57-2D, conjugates
     121405-24-1D, conjugates
                                125313-92-0D, conjugates
     125314-64-9D, conjugates
                                127243-85-0D, conjugates
     129758-26-5D, conjugates
                                133052-90-1D, conjugates
     134036-52-5D, conjugates
                                135897-06-2D, conjugates
                                137206-97-4D, conjugates
     136194-77-9D, conjugates
                                142273-20-9D, conjugates
     137658-62-9D, conjugates
                                152075-98-4D, conjugates
     146535-22-0D, conjugates
                                152459-95-5D, conjugates
     152121-47-6D, conjugates
                                154447-36-6D, conjugates
     153436-54-5D, conjugates
     160335-45-5D, conjugates
                                165806-09-7D, conjugates
```

Same the second second

æ

```
216573-59-0D, conjugates
                                 216573-62-5D, conjugates
     216573-65-8D, conjugates
                                 216573-66-9D, conjugates
                                 216573-71-6D, conjugates 216573-98-7D, conjugates
     216573-67-0D, conjugates
     216573-73-8D, conjugates
                                 216574-02-6D, conjugates
216574-04-8D, conjugates
216574-06-0D, conjugates
     216574-01-5D, conjugates
     216574-03-7D, conjugates
     216574-05-9D, conjugates
                                 216589-05-8D, conjugates
     216574-07-1D, conjugates
                                 216752-48-6D, conjugates
     216699-96-6D, conjugates
                                 219796-67-5D, conjugates
     219580-11-7D, conjugates
     220654-17-1D, conjugates
                                 220904-59-6D, conjugates
     220904-61-0D, conjugates
                                 220904-62-1D, conjugates
     220904-65-4D, conjugates
                                 220904-67-6D, conjugates
                                 220904-82-5D, conjugates
     220904-79-0D, conjugates
     220904-83-6D, conjugates
                                 221061-26-3D, conjugates
     221061-42-3D, conjugates
                                 221062-42-6D, conjugates
     221243-82-9D, conjugates
                                 221636-05-1D, conjugates
     221875-32-7D, conjugates
                                 222034-85-7D, conjugates
     222034-86-8D, conjugates
                                 222034-96-0D, conjugates
     222034-99-3D, conjugates
                                 222035-13-4D, conjugates
     222035-15-6D, conjugates
                                 222035-16-7D, conjugates
     222035-20-3D, conjugates
                                 222035-22-5D, conjugates
     222035-57-6D, conjugates
                                 222035-58-7D, conjugates
     222036-13-7D, conjugates
                                 222036-17-1D, conjugates
     222036-18-2D, conjugates
                                 222957-57-5D, conjugates
     223645-76-9D, conjugates
                                 223725-07-3D, conjugates
     223738-94-1D, conjugates
                                 223784-60-9D, conjugates
     RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (three hybrid assay system for isolating ligand-binding polypeptides
        and for isolating small mol. ligands)
ΙT
     223784-70-1D, conjugates
                                 223784-75-6D, conjugates
                                 224435-99-8D, conjugates
     224435-00-1D, conjugates
     227622-92-6D, conjugates
                                 227622-98-2D, conjugates
     227623-09-8D, conjugates
                                 228399-50-6D, conjugates
     228400-93-9D, conjugates
                                 228999-48-2D, conjugates
     229000-80-0D, conjugates
                                 229155-20-8D, conjugates
     229155-47-9D, conjugates
                                 234772-64-6D, conjugates
     237430-03-4D, conjugates
                                 240820-00-2D, conjugates
     241494-77-9D, conjugates
                                 241494-81-5D, conjugates
     243836-51-3D, conjugates
                                 244231-67-2D, conjugates
     245036-16-2D, conjugates
                                 247148-40-9D, conjugates
     248270-51-1D, conjugates
                                 249937-49-3D, conjugates
     249937-52-8D, conjugates
                                 250692-05-8D, conjugates
     251106-46-4D, conjugates
                                 251356-16-8D, conjugates
     251356-18-0D, conjugates
                                 252003-53-5D, conjugates
     252894-30-7D, conjugates
                                 252894-32-9D, conjugates
     252916-29-3D, conjugates
                                 254986-07-7D, conjugates
     258282-55-2D, Pyrido[2,3-d]pyrimidin-7(1H)-one, conjugates
     258502-99-7D, conjugates
                                 258830-51-2D, conjugates
     258831-13-9D, conjugates
                                 260428-60-2D, conjugates
     261507-52-2D, conjugates
                                 262430-03-5D, conjugates
     262432-51-9D, conjugates
                                 262445-18-1D, conjugates
                                 263149-49-1D, conjugates
     263149-48-0D, conjugates
                                 263150-06-7D, conjugates
     263149-95-7D, conjugates
                                 263150-14-7D, conjugates
     263150-07-8D, conjugates
                                 263170-24-7D, conjugates
     263150-30-7D, conjugates
     263170-85-0D, conjugates
                                 263170-86-1D, conjugates
     263170-87-2D, conjugates
                                 263170-94-1D, conjugates
```

```
263170-95-2D, conjugates
                            263171-02-4D, conjugates
                            263171-14-8D, conjugates
 263171-04-6D, conjugates
                            263267-59-0D, conjugates
 263171-19-3D, conjugates
 264136-79-0D, conjugates
                            265097-99-2D, conjugates
 265098-00-8D, conjugates
                            265098-01-9D, conjugates
                            265312-49-0D, conjugates
 265098-02-0D, conjugates
                            265312-51-4D, conjugates
 265312-50-3D, conjugates
                            267654-34-2D, conjugates
 267429-89-0D, conjugates
                            267885-29-0D, conjugates
 267885-28-9D, conjugates
                            267885-31-4D, conjugates
 267885-30-3D, conjugates
                            267885-33-6D, conjugates
 267885-32-5D, conjugates
                            267892-01-3D, conjugates
 267885-34-7D, conjugates
                            269390-69-4D, conjugates
 268559-59-7D, conjugates
                            273920-44-8D, conjugates
 273727-89-2D, conjugates
*283602-39-1D, conjugates
                            284486-91-5D, conjugates
 285125-84-0D, conjugates
                            285983-72-4D, conjugates
                            287177-32-6D, conjugates
 287177-30-4D, conjugates
                            294853-11-5D, conjugates
 289711-40-6D, conjugates
                            295330-14-2D, conjugates
 295327-39-8D, conjugates
                            297754-50-8D, conjugates
 295799-47-2D, conjugates
                            300860-00-8D, conjugates
 300715-91-7D, conjugates
                            303727-31-3D, conjugates
 303195-98-4D, conjugates
                            304664-06-0D, conjugates
 303740-80-9D, conjugates
                            307353-61-3D, conjugates
 306998-03-8D, conjugates
                            309278-63-5D, conjugates
 307353-99-7D, conjugates
                            311819-90-6D, conjugates
 311780-08-2D, conjugates
                            313389-73-0D, conjugates
 313345-15-2D, conjugates
                            322689-01-0D, conjugates
 322681-26-5D, conjugates
                            325781-16-6D, conjugates
 322689-07-6D, conjugates
 326894-84-2D, conjugates
                            329260-68-6D, conjugates
                            329727-62-0D, conjugates
 329260-78-8D, conjugates
                            331662-50-1D, conjugates
 329727-65-3D, conjugates
                            331662-52-3D, conjugates
 331662-51-2D, conjugates
                            331662-91-0D, conjugates
 331662-69-2D, conjugates
                            342647-27-2D, conjugates
 333726-41-3D, conjugates
 342647-29-4D, conjugates
                            343974-64-1D, conjugates
 343974-94-7D, conjugates
                            343974-95-8D, conjugates
 343974-96-9D, conjugates
                            344359-26-8D, conjugates
 348617-19-6D, conjugates
                            355013-01-3D, conjugates
 359886-84-3D, conjugates
                            359888-77-0D, conjugates
 360770-48-5D, conjugates
                            360770-49-6D, conjugates
 360770-50-9D, conjugates
                            360770-51-0D, conjugates
 360770-52-1D, conjugates
                            360770-53-2D, conjugates
 360770-55-4D, conjugates
                            360770-56-5D, conjugates
 364735-20-6D, conjugates
                            364788-37-4D, conjugates
 367927-40-0D, conjugates
                            367927-41-1D, conjugates
                            367927-50-2D, conjugates
 367927-47-7D, conjugates
                            380425-05-8D, conjugates
 372512-45-3D, conjugates
                            380425-09-2D, conjugates
 380425-07-0D, conjugates
                            380425-13-8D, conjugates
 380425-11-6D, conjugates
                            380843-12-9D, conjugates
 380843-09-4D, conjugates
                            380843-17-4D, conjugates
 380843-15-2D, conjugates
 380843-20-9D, conjugates
                            380843-23-2D, conjugates
 380843-26-5D, conjugates
                            380843-29-8D, conjugates
 380843-32-3D, conjugates
                            380843-36-7D, conjugates
 380843-39-0D, conjugates
                            380843-42-5D, conjugates
 380843-44-7D, conjugates
                            380843-47-0D, conjugates
 380843-50-5D, conjugates
                            380843-53-8D, conjugates
 380843-55-0D, conjugates
                            380843-58-3D, conjugates
```

```
380843-64-1D, conjugates
                                                 380843-66-3D, conjugates
       380843-68-5D, conjugates

380843-74-3D, conjugates

380843-76-5D, conjugates

380843-79-8D, conjugates

380843-84-5D, conjugates

381694-53-7D, conjugates

388120-05-6D, conjugates
                                                 380843-70-9D, conjugates
                                                 380843-75-4D, conjugates
                                                 380843-77-6D, conjugates
                                                 380843-81-2D, conjugates
                                                 380843-86-7D, conjugates
                                                 383123-03-3D, conjugates
        388120-05-6D, conjugates
                                                 388626-12-8D, conjugates
        388626-13-9D, conjugates
                                                 388626-14-0D, conjugates
       388626-16-2D, conjugates
                                                 388626-20-8D, conjugates
       388626-23-1D, conjugates
388626-27-5D, conjugates
388626-38-8D, conjugates
388626-46-8D, conjugates
388626-51-5D, conjugates
                                                 388626-25-3D, conjugates
                                                 388626-31-1D, conjugates
                                                388626-31-1D, conjugates

388626-40-2D, conjugates

388626-49-1D, conjugates

388626-54-8D, conjugates

388626-58-2D, conjugates

388626-62-8D, conjugates

388626-68-4D, conjugates

388626-73-1D, conjugates

388626-78-6D, conjugates

388626-84-4D, conjugates

388626-89-9D, conjugates

388626-93-5D, conjugates
       388626-56-0D, conjugates
       388626-60-6D, conjugates
       388626-66-2D, conjugates
       388626-70-8D, conjugates
       388626-75-3D, conjugates
       388626-82-2D, conjugates
       388626-86-6D, conjugates
       388626-91-3D, conjugates
                                                 388626-93-5D, conjugates
       388626-91-3D, conjugates

388626-95-7D, conjugates

388626-99-1D, conjugates

388627-11-0D, conjugates

388627-35-8D, conjugates

388627-57-4D, conjugates

388627-61-0D, conjugates
                                                 388626-97-9D, conjugates 388627-01-8D, conjugates
                                                 388627-13-2D, conjugates
388627-55-2D, conjugates
388627-59-6D, conjugates
388627-76-7D, conjugates
393590-60-8D, conjugates
431916-96-0D, conjugates
       391937-51-2D, conjugates
       413599-62-9D, conjugates
439211-02-6, Streptactin
       439211-02-6, Streptactin 444722-95-6D, conjugates
RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL
        (Biological study); USES (Uses)
            (three hybrid assay system for isolating ligand-binding polypeptides
            and for isolating small mol. ligands)
       452913-20-1D, conjugates
501684-20-4D, conjugates
582315-72-8D, conjugates
666837-86-1D, conjugates
666837-88-3D, conjugates
                                                452913-27-8D, conjugates
IT
                                                 521059-79-0D, conjugates
                                                 609359-65-1D, conjugates 666837-87-2D, conjugates
                                                 666837-89-4D, conjugates
       666837-90-7D, conjugates
                                                 666837-91-8D, conjugates
       666837-92-9D, conjugates
                                                 666837-93-0D, conjugates
       666837-94-1D, conjugates
                                                 666837-95-2D, conjugates
       666837-96-3D, conjugates
                                                 666837-98-5D, conjugates
       666837-99-6D, conjugates
                                                 666838-00-2D, conjugates
       666838-01-3D, conjugates
                                                 666838-02-4D, conjugates
       666838-03-5D, conjugates
                                                 666838-04-6D, conjugates
       666838-05-7D, conjugates
                                                 666838-06-8D, conjugates
       666838-07-9D, conjugates
                                                 666838-08-0D, conjugates
       666838-09-1D, conjugates
                                                 666838-11-5D, conjugates
       666838-12-6D, conjugates
                                                 666838-13-7D, conjugates
       666838-14-8D, conjugates
                                                 666838-15-9D, conjugates
       666838-16-0D, conjugates
                                                 666838-17-1D, conjugates
       666838-18-2D, conjugates
                                                 666838-19-3D, conjugates
       666838-20-6D, conjugates
                                                 666838-21-7D, conjugates
       666838-22-8D, conjugates
                                                 666838-23-9D, conjugates
       666838-24-0D, conjugates
                                                 666838-25-1D, conjugates
       666838-26-2D, conjugates
                                                 666838-27-3D, conjugates
```

```
666838-30-8D, conjugates
666838-28-4D, conjugates
666838-31-9D, conjugates
                           666838-32-0D, conjugates
                           666838-34-2D, conjugates
666838-33-1D, conjugates
                           666838-36-4D, conjugates
666838-35-3D, conjugates
                           666838-38-6D, conjugates
666838-37-5D, conjugates
                           666838-40-0D, conjugates
666838-39-7D, conjugates
666838-41-1D, conjugates
                           666838-42-2D, conjugates
666838-45-5D, conjugates
                           666838-47-7D, conjugates
666838-48-8D, conjugates
                           666838-49-9D, conjugates
666838-50-2D, conjugates
                           666838-51-3D, conjugates
                           666838-54-6D, conjugates
666838-53-5D, conjugates
                           666838-56-8D, conjugates
666838-55-7D, conjugates
                           666838-58-0D, conjugates
666838-60-4D, conjugates
666838-57-9D, conjugates
666838-59-1D, conjugates
                           666838-62-6D, conjugates
666838-61-5D, conjugates
                           666838-64-8D, conjugates
666838-63-7D, conjugates
                           666838-66-0D, conjugates
666838-65-9D, conjugates
666838-67-1D, conjugates
                           666838-68-2D, conjugates
                           666838-70-6D, conjugates
666838-69-3D, conjugates
                           666838-72-8D, conjugates
666838-71-7D, conjugates
666838-73-9D, conjugates
                           666838-74-0D, conjugates
                           666838-76-2D, conjugates
666838-75-1D, conjugates
                           666838-78-4D, conjugates
666838-77-3D, conjugates
666838-79-5D, conjugates
                           666838-80-8D, conjugates
                           666838-82-0D, conjugates
666838-81-9D, conjugates
                           666838-85-3D, conjugates
666838-84-2D, conjugates
                           666838-87-5D, conjugates
666838-86-4D, conjugates
                           666838-89-7D, conjugates
666838-88-6D, conjugates
666838-90-0D, conjugates
                           666838-91-1D, conjugates
666838-92-2D, conjugates
                           666838-93-3D, conjugates
666838-94-4D, conjugates
                           666838-95-5D, conjugates
666838-96-6D, conjugates
                           666838-97-7D, conjugates
                           666839-00-5D, conjugates
666838-98-8D, conjugates
666839-01-6D, conjugates
                           666839-02-7D, conjugates
666839-03-8D, conjugates
                           666839-04-9D, conjugates
                           666839-07-2D, conjugates
666839-06-1D, conjugates
666839-08-3D, conjugates
RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL
(Biological study); USES (Uses)
   (three hybrid assay system for isolating ligand-binding polypeptides
   and for isolating small mol. ligands)
383-63-1, Ethyl trifluoroacetate 641-70-3, 3-Nitrophthalic anhydride
                        19741-14-1
                                      37927-01-8 52853-40-4 54696-05-8
2528-30-5
            17376-42-0
                            212844-54-7, Purvalanol B 264141-07-3
109745-15-5
              134179-38-7
666839-13-0
              666839-14-1
                            666839-15-2
RL: RCT (Reactant); RACT (Reactant or reagent)
   (three hybrid assay system for isolating ligand-binding polypeptides
   and for isolating small mol. ligands)
                             452913-12-1P
                                             452913-13-2P
                                                             452913-14-3P
               452913-11-0P
190020-14-5P
                                             452913-18-7P
                              452913-17-6P
                                                             452913-19-8P
452913-15-4P
               452913-16-5P
                              452913-23-4P
                                             452913-24-5P
                                                             452913-25-6P
452913-20-1P
               452913-21-2P
                                             452913-29-0P
                                                             452913-30-3P
452913-26-7P
               452913-27-8P
                              452913-28-9P
               452913-32-5P
                              452913-33-6P
                                              452913-34-7P
                                                             452913-35-8P
452913-31-4P
452913-36-9P
               452913-37-0P 452913-38-1P
                                             452913-39-2P
                                                             666839-16-3P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
   (three hybrid assay system for isolating ligand-binding polypeptides
   and for isolating small mol. ligands)
                                145935-81-5 668437-05-6 668514-59-8
83335-41-5, Dynorphin B (swine)
```

IT

IT

TT

```
668514-60-1
              668514-61-2
                             668514-62-3
                                            668514-63-4
                                                           668514-64-5
668514-65-6
              668514-66-7
                             668514-67-8
                                            668514-68-9
                                                           668514-69-0
              668514-71-4
668514-70-3
                             668514-72-5
                                            668514-73-6
                                                           668514-74-7
668514-75-8
              668514-76-9
                             668514-77-0
                                            668514-78-1
                                                           668514-79-2
668514-80-5
              668514-81-6
                             668514-82-7
                                            668514-83-8
                                                           668514-84-9
668514-85-0
              668514-86-1
                             668514-87-2
                                            668514-88-3
                                                           668514-89-4
668514-90-7
              668514-91-8
                             668514-92-9
                                            668514-93-0
                                                           668514-94-1
668514-95-2
```

RL: PRP (Properties)

(unclaimed sequence; three hybrid assay system for isolating ligand-binding polypeptides and for isolating small mol. ligands)

IT 50-02-2D, Dexamethasone, conjugates 53-06-5D,

Cortisone, conjugates

RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(three hybrid assay system for isolating ligand-binding polypeptides and for isolating small mol. ligands)

RN 50-02-2 HCAPLUS

CN Pregna-1,4-diene-3,20-dione, 9-fluoro-11,17,21-trihydroxy-16-methyl-,  $(11\beta,16\alpha)$ - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 53-06-5 HCAPLUS

CN Pregn-4-ene-3,11,20-trione, 17,21-dihydroxy- (7CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry.

L46 ANSWER 7 OF 65 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2004:20534 HCAPLUS

DN 140:92584

ED Entered STN: 11 Jan 2004

TIMethods for therapeutic treatment utilizing sub-clinical amount of a therapeutic agent combined with or conjugated to an antibody, or fragment thereof Lazarovits, Janette; Nimrod, Abraham; Hoch-Mar-Chaim, Hagit; Levanon, TN Avigdor PA Savient Pharmaceuticals, Inc., USA PCT Int. Appl., 58 pp. SO CODEN: PIXXD2 DTPatent English LΆ ICM A61K039-395 IC ICS A61K051-00; A61K038-00; A61K039-00 CC 15-3 (Immunochemistry) Section cross-reference(s): 1, 3, 8, 63 FAN.CNT 1 PATENT NO. KIND DATE APPLICATION NO. DATE \_\_\_\_\_ \_\_\_\_ \_\_\_\_\_ WO 2004002528 A1 20040108 WO 2003-US20604 20030630 PΙ W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG PRAI US 2002-189025 20020701 Α CLASS CLASS PATENT FAMILY CLASSIFICATION CODES PATENT NO. \_\_\_\_\_\_ WO 2004002528 ICM A61K039-395 ICS A61K051-00; A61K038-00; A61K039-00 The present invention relates to compns. utilizing an agent and an AB antibody, or fragment thereof. In these compns., the agents, including agents such as anti-cancer, anti-metastasis, anti-leukemia, anti-disease, anti-adhesion, anti-thrombosis, anti-restenosis, anti-autoimmune, anti-aggregation, anti-bacterial, anti-viral, and anti-inflammatory agents, can be complexed or combined with or conjugated to the antibodies, or fragments thereof. In addition, the agent and/or the antibody, or fragment thereof, can be present in the composition in a sub-clin. amount, which is an amount that is less than the amount of the agent generally found to be clin. effective when the agent is administered alone. Preferably, in these compns. of the present invention, the agent is an anthracycline or a derivative thereof, e.g., doxorubicin (adriamycin) or a derivative thereof. The antibodies or fragments are capable of binding to, e.g. PSGL-1, fibrinogen  $\gamma'$ , GP1b $\alpha$ , heparin, lumican, complement C4 inter- $\alpha$  inhibitor and prothrombin. Antibodies were identified by screening a human antibody phage display library, which has diversity only in the heavy chain CDR3 regions. Specific examples of antibodies disclosed in these applications include the Y1 and Y17 scFv antibody fragments that bind glycocalicin mols. on platelets. In addition, the L32 and L31 scFv antibody fragments were disclosed that bind leukemic human antibody fragment phage display library sequence; platelet antibody STthrombosis anticoagulant; anticancer cancer diagnosis antibody leukemia Leukemia IΤ (B-cell; methods for therapeutic treatment utilizing sub-clin. amount of

### Cordero-Garcia PCT/US03/26233

therapeutic agent combined with or conjugated to antibody, or fragment thereof) ΙT Glycoproteins RL: BSU (Biological study, unclassified); BIOL (Biological study) (GPIb,  $\alpha$ , antibody against; methods for therapeutic treatment utilizing sub-clin. amount of therapeutic agent combined with or conjugated to antibody, or fragment thereof) ፐጥ Glycoproteins RL: BSU (Biological study, unclassified); BIOL (Biological study) (PSGL-1 (P-selectin glycoprotein ligand-1), antibody against; methods for therapeutic treatment utilizing sub-clin. amount of therapeutic agent combined with or conjugated to antibody, or fragment thereof) Amino acids, biological studies ΤТ RL: BSU (Biological study, unclassified); BIOL (Biological study) (acidic, epitope comprising; methods for therapeutic treatment utilizing sub-clin. amount of therapeutic agent combined with or conjugated to antibody, or fragment thereof) TΤ Leukemia (acute myelogenous; methods for therapeutic treatment utilizing sub-clin. amount of therapeutic agent combined with or conjugated to antibody, or fragment thereof) ΙT Platelet (blood) (adhesion, inhibition; methods for therapeutic treatment utilizing sub-clin. amount of therapeutic agent combined with or conjugated to antibody, or fragment thereof) ITPlatelet (blood) (aggregation, inhibition; methods for therapeutic treatment utilizing sub-clin. amount of therapeutic agent combined with or conjugated to antibody, or fragment thereof) TΤ Leukemia (chronic B-lymphocytic; methods for therapeutic treatment utilizing sub-clin. amount of therapeutic agent combined with or conjugated to antibody, or fragment thereof) Antibodies and Immunoglobulins ΙT RL: DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (complexes; methods for therapeutic treatment utilizing sub-clin. amount of therapeutic agent combined with or conjugated to antibody, or fragment thereof) ΤT Epitopes (comprising acidic amino acids and sulfated tyrosine residue; methods for therapeutic treatment utilizing sub-clin. amount of therapeutic agent combined with or conjugated to antibody, or fragment thereof) IT Antibodies and Immunoglobulins RL: DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (conjugates; methods for therapeutic treatment utilizing sub-clin. amount of therapeutic agent combined with or conjugated to antibody, or fragment thereof) Drug delivery systems IT (dextran, lipophilic polymers, hydrophilic polymers, HPMA; methods for therapeutic treatment utilizing sub-clin. amount of therapeutic agent combined with or conjugated to antibody, or fragment thereof)

IT Polyoxyalkylenes, biological studies RL: THU (Therapeutic use); BIOL (Bio.

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (drug delivery using; methods for therapeutic treatment utilizing sub-clin. amount of therapeutic agent combined with or conjugated to antibody, or fragment thereof)

IT Toxins

```
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (endotoxins, Pseudomonas, PE40, PE38,; methods for therapeutic
        treatment utilizing sub-clin. amount of therapeutic agent combined with
        or conjugated to antibody, or fragment thereof)
     Antibodies and Immunoglobulins
ΙT
     RL: DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (fragments, scFv or Fab; methods for therapeutic treatment utilizing
        sub-clin. amount of therapeutic agent combined with or conjugated
        to antibody, or fragment thereof)
ΙT
     Glycoproteins
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (glycocalicins, platelet, antibody against; methods for therapeutic
        treatment utilizing sub-clin. amount of therapeutic agent combined with
        or conjugated to antibody, or fragment thereof)
TΤ
     Cell proliferation
        (inhibition, tumor; methods for therapeutic treatment utilizing
        sub-clin. amount of therapeutic agent combined with or conjugated
        to antibody, or fragment thereof)
     Adhesion, biological
ΙT
     Cell aggregation
        (inhibition; methods for therapeutic treatment utilizing sub-clin. amount
        of therapeutic agent combined with or conjugated to antibody,
        or fragment thereof)
IΤ
     Drug delivery systems
        (liposomes, doxorubicin-decorated; methods for therapeutic treatment
        utilizing sub-clin. amount of therapeutic agent combined with or
        conjugated to antibody, or fragment thereof)
ΙT
     Proteoglycans, biological studies
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (lumicans, antibody against; methods for therapeutic treatment
        utilizing sub-clin. amount of therapeutic agent combined with or
        conjugated to antibody, or fragment thereof)
IT
    Neoplasm
        (metastasis; methods for therapeutic treatment utilizing sub-clin. amount
        of therapeutic agent combined with or conjugated to antibody,
        or fragment thereof)
ΙT
    Anti-inflammatory agents
     Antibacterial agents
     Anticoagulants
     Antitumor agents
     Antiviral agents
     Autoimmune disease
     Chemotherapy
     Human
     Immunotherapy
     Inflammation
     Leukemia
     Molecular cloning
     Multiple myeloma
     Neoplasm
     Phage display library
     Platelet (blood)
     Platelet aggregation inhibitors
     Radiotherapy
     Thrombolytics
     Thrombosis
        (methods for therapeutic treatment utilizing sub-clin. amount of
        therapeutic agent combined with or conjugated to antibody, or
```

```
fragment thereof)
IT
     Antibodies and Immunoglobulins
     RL: DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (methods for therapeutic treatment utilizing sub-clin. amount of
        therapeutic agent combined with or conjugated to antibody, or
        fragment thereof)
ΙT
     Anthracyclines
     Radionuclides, biological studies
     Ricins
     Toxins
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (methods for therapeutic treatment utilizing sub-clin. amount of
        therapeutic agent combined with or conjugated to antibody, or
        fragment thereof)
     Protein sequences
ΙT
        (of antibody fragments; methods for therapeutic treatment utilizing
        sub-clin. amount of therapeutic agent combined with or conjugated
        to antibody, or fragment thereof)
     Artery, disease
ΙT
        (restenosis; methods for therapeutic treatment utilizing sub-clin. amount
        of therapeutic agent combined with or conjugated to antibody,
        or fragment thereof)
ΙT
    Cell death
        (tumor, induction; methods for therapeutic treatment utilizing
        sub-clin. amount of therapeutic agent combined with or conjugated
        to antibody, or fragment thereof)
     Interferons
IT
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (\alpha; methods for therapeutic treatment utilizing sub-clin. amount of
        therapeutic agent combined with or conjugated to antibody, or
        fragment thereof)
ΙT
     Fibrinogens
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (\gamma chain, \gamma', antibody against; methods for therapeutic
        treatment utilizing sub-clin. amount of therapeutic agent combined with
        or conjugated to antibody, or fragment thereof)
     23214-92-8, Doxorubicin
IT
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (-decorated liposome; methods for therapeutic treatment utilizing
        sub-clin. amount of therapeutic agent combined with or conjugated
        to antibody, or fragment thereof)
     147-94-4, Cytarabine
ΙΤ
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (Ara-C; methods for therapeutic treatment utilizing sub-clin. amount of
        therapeutic agent combined with or conjugated to antibody, or
        fragment thereof)
     9041-08-1, Heparin sodium
ΙT
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (Reviparin, Dalteparin; methods for therapeutic treatment utilizing
        sub-clin. amount of therapeutic agent combined with or conjugated
        to antibody, or fragment thereof)
                                  268723-76-8
                   212783-31-8
                                               442527-61-9
                                                               642928-14-1
IT
     212783-20-5
     RL: DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (amino acid sequence, antibody fragment; methods for therapeutic
        treatment utilizing sub-clin. amount of therapeutic agent combined with
        or conjugated to antibody, or fragment thereof)
```

645004-07-5 645004-08-6 645004-09-7

ΙT

```
RL: DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (amino acid sequence; methods for therapeutic treatment utilizing
        sub-clin. amount of therapeutic agent combined with or conjugated
        to antibody, or fragment thereof)
ΙT
     9001-26-7, Prothrombin
                             9005-49-6, Heparin, biological studies
     39346-44-6, Inter-.\alpha.-trypsin inhibitor
                                              80295-48-3, Complement C4
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (antibody against; methods for therapeutic treatment utilizing
        sub-clin. amount of therapeutic agent combined with or conjugated
        to antibody, or fragment thereof)
ΙT
     9004-54-0, Dextran, biological studies
                                              25322-68-3, Polyethylene glycol
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (drug delivery using; methods for therapeutic treatment utilizing
        sub-clin. amount of therapeutic agent combined with or conjugated
        to antibody, or fragment thereof)
ΙT
     60-18-4D, Tyrosine, sulfated
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (epitope comprising; methods for therapeutic treatment utilizing
        sub-clin. amount of therapeutic agent combined with or conjugated
        to antibody, or fragment thereof)
                                 50-35-1, Thalidomide
IT
     50-18-0, Cyclophosphamide
                                                         50-78-2, Aspirin
                           53-86-1, Indomethacin
     53-03-2, Prednisone
                                                  57-22-7, Vincristine
     127-07-1, Hydroxyurea
                             305-03-3, Chlorambucil 7440-15-5D, Rhenium,
                                   7440-63-3D, Xenon, isotope of mass 33,
     isotopes, biological studies
    biological studies 9004-61-9, Hyaluronic acid
     10043-66-0, Iodine-131, biological studies
                                                 10098-91-6, Yttrium-90,
                          11056-06-7, Bleomycin 13968-53-1, Ruthenium-103,
    biological studies
                          13981-56-1, Fluorine-18, biological studies
    biological studies
     13982-78-0, Mercury-203, biological studies 14041-48-6, Thulium-165,
     biological studies 14119-09-6, Gallium-67, biological studies
     14133-76-7, Technetium-99, biological studies 14158-32-8, Iodine-126,
    biological studies 14331-95-4, Ruthenium-105, biological studies
     14390-71-7, Tellurium-122, biological studies 14390-73-9, Tellurium-125,
    biological studies 14391-22-1, Thulium-167, biological studies 14834-67-4, Iodine-133, biological studies 14885-78-0, Indium 113,
                         14900-13-1, Thulium-168, biological studies
    biological studies
                              15663-27-1, cis-Platinum 15678-91-8,
     15307-86-5, Diclofenac
    Krypton-81, biological studies 15687-27-1, Ibuprofen 15715-08-9, Iodine-123, biological studies 15750-15-9, Indium 111, biological
                                                              15715-08-9,
               15756-62-4, Ruthenium-95, biological studies
                                                               15757-14-9,
     studies
    Gallium-68, biological studies 15758-35-7, Ruthenium-97, biological
               15765-39-6, Bromine-77, biological studies 15776-20-2,
    Bismuth-213, biological studies 20830-81-3, Daunorubicin
                                                                   21679-14-1,
                   22204-53-1, Naproxen 30516-87-1, Zidovudine
     Fludarabine
                                                                   33069-62-4,
             38194-50-2, Sulindac 51146-56-6, Dexibuprofen
                                                               51803-78-2,
    Taxol
                 52549-17-4, Pranoprofen
                                           58957-92-9, Idarubicin
    Nimesulide
     59277-89-3, Acyclovir
                            73963-72-1, Cilostazol
                                                      74397-12-9, Limaprost
     74711-43-6, Zaltoprofen
                              75037-46-6D, Gelonin, derivs.
                                                                75706-12-6,
                   79867-78-0, Morpholinodaunorubicin 80790-68-7,
    Leflunomide
                             82410-32-0, Ganciclovir
                                                        83712-60-1, Defibrotide
    Morpholinodoxorubicin
                               87344-06-7 90101-16-9, Droxicam
     85622-93-1, Temozolomide
     108852-90-0, Methoxymorpholinyldoxorubicin
                                                  113440-58-7, Calicheamicin
     162011-90-7, Rofecoxib
                             169590-42-5, Celecoxib 173146-27-5, Denileukin
     diftitox
                262423-20-1, Subreum
                                      425603-01-6, WinRho SDF
                                                                  640734-07-2,
    Clorcromene
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (methods for therapeutic treatment utilizing sub-clin. amount of
        therapeutic agent combined with or conjugated to antibody, or
```

fragment thereof)

IT 485815-21-2

RL: PRP (Properties)

(unclaimed sequence; methods for therapeutic treatment utilizing sub-clin. amount of a therapeutic agent combined with or conjugated to an antibody, or fragment thereof)

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD RE

- (1) Manjunath; US 20020058034 A1 2002
- (2) Suiko; US 5716836 A 1998 HCAPLUS
- (3) Thorpe; US 6312694 B1 2001 HCAPLUS
- RN 53-03-2 HCAPLUS
- CN Pregna-1,4-diene-3,11,20-trione, 17,21-dihydroxy- (8CI, 9CI) (CA INDEX NAME)

- RN 9004-61-9 HCAPLUS
- CN Hyaluronic acid (8CI, 9CI) (CA INDEX NAME)
- \*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*
- L46 ANSWER 8 OF 65 HCAPLUS COPYRIGHT 2004 ACS on STN
- AN 2004:3647 HCAPLUS
- DN 140:92576
- ED Entered STN: 04 Jan 2004
- TI Antibodies specific to epitopes involving cell rolling, metastasis and inflammation for diagnosis and treatment of cancer, metastasis, leukemia, autoimmune disease and inflammation
- IN Lazarovits, Janette; Hagay, Yocheved; Plaksin, Daniel; Vogel, Tikva; Nimrod, Abraham; Mar-Ham, Hagit; Szanthon, Ester; Richter, Tamar; Amit, Boaz; Cooperman, Lena; Peretz, Tuvia; Levanon, Avigdor
- PA Israel
- SO U.S. Pat. Appl. Publ., 155 pp., Cont.-in-part of U.S. Provisional Ser. No. 258,948.

  CODEN: USXXCO
- DT Patent
- LA English
- IC ICM A61K038-16
  - ICS A61K038-10; A61K038-08; C07K014-16; C07K007-08; C07K007-06
- NCL 514012000; 514013000; 514014000; 514015000; 514016000; 530324000;

```
530325000; 530326000; 530327000; 530328000
CC
     15-3 (Immunochemistry)
     Section cross-reference(s): 1, 3, 9, 63
FAN.CNT 5
     PATENT NO.
                                DATE APPLICATION NO. DATE
                       KIND
PI US 2004002450 A1 20040101 US 2001-32423 20011231 US 2004073011 A1 20040415 US 2001-29926 20011231 PRAI US 2000-258948P P 20001229
CLASS
 PATENT NO. CLASS PATENT FAMILY CLASSIFICATION CODES
 ______
 US 2004002450 ICM A61K038-16 ICS A61K038-10; A61K038-08; C07K014-16; C07K007-08;
                        C07K007-06
                NCL 514012000; 514013000; 514014000; 514015000; 514016000;
                        530324000; 530325000; 530326000; 530327000; 530328000
 US 2004002450 ECLA C07K014/47A11; C07K016/30M
 US 2004073011 ECLA C07K016/00A; C07K016/30M
     The present invention provides epitopes present on cancer cells and
AB
     important in physiol. phenomena such as cell rolling, metastasis, and
     inflammation. Therapeutic and diagnostic methods and compns. using
     antibodies capable of binding to the epitopes are provided. Methods and
     compns. according to the present invention can be used in diagnosis of and
     therapy for such diseases as cancer, including tumor growth and
     metastasis, leukemia, auto-immune disease, inflammatory disease,
     cardiovascular disease, myocardial infarction, retinopathy, thrombosis,
     restenosis, and cell aggregation-related disease.
     antibody sulfated tyrosine epitope cell rolling metastasis inflammation
ST
     autoimmune
IΤ
     Glycoproteins
     RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU
     (Therapeutic use); BIOL (Biological study); USES (Uses)
        (GPIb, \alpha; antibodies specific to epitopes involving cell rolling,
        metastasis and inflammation for diagnosis and treatment of cancer,
        metastasis, leukemia, autoimmune disease and inflammation)
ΙT
     Glycoproteins
     RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU
     (Therapeutic use); BIOL (Biological study); USES (Uses)
        (PSGL-1 (P-selectin glycoprotein ligand-1); antibodies specific to
        epitopes involving cell rolling, metastasis and inflammation for
        diagnosis and treatment of cancer, metastasis, leukemia, autoimmune
        disease and inflammation)
ΙT
    Leukemia
        (acute myelogenous; antibodies specific to epitopes involving cell
        rolling, metastasis and inflammation for diagnosis and treatment of
        cancer, metastasis, leukemia, autoimmune disease and inflammation)
     Platelet (blood)
ΙT
        (aggregation; antibodies specific to epitopes involving cell rolling,
        metastasis and inflammation for diagnosis and treatment of cancer,
        metastasis, leukemia, autoimmune disease and inflammation)
     Adhesion, biological
ΙT
     Anti-inflammatory agents
     Antibacterial agents
     Anticoagulants
     Antitumor agents
     Antiviral agents
     Apoptosis
     Autoimmune disease
```

### Cordero-Garcia PCT/US03/26233

Cardiovascular system, disease Cell proliferation DNA sequences Drugs Epitopes Human Imaging agents Immunoradiotherapy Immunotherapy Inflammation Leukemia Molecular cloning Multiple myeloma Peptidomimetics Phage display library Platelet (blood) Protein sequences Pseudomonas Thrombosis X-ray (antibodies specific to epitopes involving cell rolling, metastasis and inflammation for diagnosis and treatment of cancer, metastasis, leukemia, autoimmune disease and inflammation) ITAntibodies and Immunoglobulins RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (antibodies specific to epitopes involving cell rolling, metastasis and inflammation for diagnosis and treatment of cancer, metastasis, leukemia, autoimmune disease and inflammation) ΙT Radionuclides, biological studies Ricins Toxins RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (antibodies specific to epitopes involving cell rolling, metastasis and inflammation for diagnosis and treatment of cancer, metastasis, leukemia, autoimmune disease and inflammation) ΙT Diagnosis (cancer; antibodies specific to epitopes involving cell rolling, metastasis and inflammation for diagnosis and treatment of cancer, metastasis, leukemia, autoimmune disease and inflammation) Drug delivery systems ΙT (carriers; antibodies specific to epitopes involving cell rolling, metastasis and inflammation for diagnosis and treatment of cancer, metastasis, leukemia, autoimmune disease and inflammation) IT Cell migration (cell rolling; antibodies specific to epitopes involving cell rolling, metastasis and inflammation for diagnosis and treatment of cancer, metastasis, leukemia, autoimmune disease and inflammation) Neoplasm TT (cells; antibodies specific to epitopes involving cell rolling, metastasis and inflammation for diagnosis and treatment of cancer, metastasis, leukemia, autoimmune disease and inflammation) ΙT (chronic B-lymphocytic; antibodies specific to epitopes involving cell rolling, metastasis and inflammation for diagnosis and treatment of cancer, metastasis, leukemia, autoimmune disease and inflammation) IT Peptides, biological studies

```
RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU
     (Therapeutic use); BIOL (Biological study); USES (Uses)
        (conjugates, sulfated; antibodies specific to epitopes
        involving cell rolling, metastasis and inflammation for diagnosis and
        treatment of cancer, metastasis, leukemia, autoimmune disease and
        inflammation)
ΙT
     Artery, disease
        (coronary, restenosis; antibodies specific to epitopes involving cell
        rolling, metastasis and inflammation for diagnosis and treatment of
        cancer, metastasis, leukemia, autoimmune disease and inflammation)
ΙT
     Test kits
        (diagnostic; antibodies specific to epitopes involving cell rolling,
        metastasis and inflammation for diagnosis and treatment of cancer,
        metastasis, leukemia, autoimmune disease and inflammation)
IT
     RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU
     (Therapeutic use); BIOL (Biological study); USES (Uses)
        (exotoxins, PE40 and PE38; antibodies specific to epitopes involving
        cell rolling, metastasis and inflammation for diagnosis and treatment
        of cancer, metastasis, leukemia, autoimmune disease and inflammation)
ΙT
     Antibodies and Immunoglobulins
     RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
     DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL
     (Biological study); PREP (Preparation); USES (Uses)
        (fragments, scFv; antibodies specific to epitopes involving cell
        rolling, metastasis and inflammation for diagnosis and treatment of
        cancer, metastasis, leukemia, autoimmune disease and inflammation)
ΙT
     Antibodies and Immunoglobulins
     RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
     DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL
     (Biological study); PREP (Preparation); USES (Uses)
        (heavy chain; antibodies specific to epitopes involving cell rolling,
        metastasis and inflammation for diagnosis and treatment of cancer,
        metastasis, leukemia, autoimmune disease and inflammation)
ΙT
     Drug delivery systems
        (immunoconjugates; antibodies specific to epitopes involving cell
        rolling, metastasis and inflammation for diagnosis and treatment of
        cancer, metastasis, leukemia, autoimmune disease and inflammation)
ΙT
        (immunodiagnosis; antibodies specific to epitopes involving cell
        rolling, metastasis and inflammation for diagnosis and treatment of
        cancer, metastasis, leukemia, autoimmune disease and inflammation)
     Drug delivery systems
IT
        (immunotoxins; antibodies specific to epitopes involving cell rolling,
        metastasis and inflammation for diagnosis and treatment of cancer,
        metastasis, leukemia, autoimmune disease and inflammation)
IΤ
        (infarction; antibodies specific to epitopes involving cell rolling,
        metastasis and inflammation for diagnosis and treatment of cancer,
        metastasis, leukemia, autoimmune disease and inflammation)
     Antibodies and Immunoglobulins
ΙT
     RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
     DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL
     (Biological study); PREP (Preparation); USES (Uses)
        (light chain; antibodies specific to epitopes involving cell rolling,
        metastasis and inflammation for diagnosis and treatment of cancer,
        metastasis, leukemia, autoimmune disease and inflammation)
     Polymers, biological studies
TΤ
     RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU
```

```
(Therapeutic use); BIOL (Biological study); USES (Uses)
        (lipophilic; antibodies specific to epitopes involving cell rolling,
        metastasis and inflammation for diagnosis and treatment of cancer,
        metastasis, leukemia, autoimmune disease and inflammation)
ΙT
     Drug delivery systems
        (liposomes; antibodies specific to epitopes involving cell rolling,
        metastasis and inflammation for diagnosis and treatment of cancer,
        metastasis, leukemia, autoimmune disease and inflammation)
     Proteoglycans, biological studies
ΤТ
     RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU
     (Therapeutic use); BIOL (Biological study); USES (Uses)
        (lumicans; antibodies specific to epitopes involving cell rolling,
        metastasis and inflammation for diagnosis and treatment of cancer,
       metastasis, leukemia, autoimmune disease and inflammation)
ΙT
    Neoplasm
        (metastasis; antibodies specific to epitopes involving cell rolling,
       metastasis and inflammation for diagnosis and treatment of cancer,
        metastasis, leukemia, autoimmune disease and inflammation)
ΙT
    Antibodies and Immunoglobulins
     RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
     DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL
     (Biological study); PREP (Preparation); USES (Uses)
        (monoclonal; antibodies specific to epitopes involving cell rolling,
       metastasis and inflammation for diagnosis and treatment of cancer,
       metastasis, leukemia, autoimmune disease and inflammation)
     Peptides, biological studies
ΙT
     RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU
     (Therapeutic use); BIOL (Biological study); USES (Uses)
        (oligopeptides; antibodies specific to epitopes involving cell rolling,
       metastasis and inflammation for diagnosis and treatment of cancer,
       metastasis, leukemia, autoimmune disease and inflammation)
    Drug delivery systems
ΙT
        (polymer-bound; antibodies specific to epitopes involving cell rolling,
        metastasis and inflammation for diagnosis and treatment of cancer,
        metastasis, leukemia, autoimmune disease and inflammation)
ΙT
    Sulfation
        (post-translational modification; antibodies specific to epitopes
        involving cell rolling, metastasis and inflammation for diagnosis and
        treatment of cancer, metastasis, leukemia, autoimmune disease and
        inflammation)
ΙT
    Eye, disease
        (retinopathy; antibodies specific to epitopes involving cell rolling,
        metastasis and inflammation for diagnosis and treatment of cancer,
        metastasis, leukemia, autoimmune disease and inflammation)
ΙT
     Protein motifs
        (sulfated L-tyrosine; antibodies specific to epitopes involving cell
        rolling, metastasis and inflammation for diagnosis and treatment of
        cancer, metastasis, leukemia, autoimmune disease and inflammation)
IT
     Carbohydrates, biological studies
     Glycolipids
    Lipids, biological studies
     Lipopolysaccharides
     Lipoproteins
     RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU
     (Therapeutic use); BIOL (Biological study); USES (Uses)
        (sulfated; antibodies specific to epitopes involving cell rolling,
        metastasis and inflammation for diagnosis and treatment of cancer,
        metastasis, leukemia, autoimmune disease and inflammation)
ΙT
     Interferons
```

```
RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU
     (Therapeutic use); BIOL (Biological study); USES (Uses)
        (a; antibodies specific to epitopes involving cell rolling,
        metastasis and inflammation for diagnosis and treatment of cancer,
        metastasis, leukemia, autoimmune disease and inflammation)
ΙT
     Fibrinogens
     RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU
     (Therapeutic use); BIOL (Biological study); USES (Uses)
        (\gamma'); antibodies specific to epitopes involving cell rolling,
        metastasis and inflammation for diagnosis and treatment of cancer,
        metastasis, leukemia, autoimmune disease and inflammation)
                                                     442528-33-8D, tyrosine-sulfated
ΙT
     442528-31-6D, tyrosine-sulfated derivative
                  442528-34-9D, tyrosine-sulfated derivative
                                                                   639862-76-3D,
     derivative
     tyrosine-sulfated derivative
     RL: BSU (Biological study, unclassified); DGN (Diagnostic use); PRP
     (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (GP1b-\alpha \text{ epitope}; \text{ antibodies specific to epitopes involving cell}
        rolling, metastasis and inflammation for diagnosis and treatment of
        cancer, metastasis, leukemia, autoimmune disease and inflammation)
IT
     442528-29-2D, tyrosine-sulfated derivative
     RL: BSU (Biological study, unclassified); DGN (Diagnostic use); PRP
     (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (PSGL-1 (P-selectin glycoprotein ligand-1) epitope; antibodies specific
        to epitopes involving cell rolling, metastasis and inflammation for diagnosis and treatment of cancer, metastasis, leukemia, autoimmune
        disease and inflammation)
ΙT
     442527-66-4
                    442527-67-5
     RL: PRP (Properties)
        (Unclaimed; antibodies specific to epitopes involving cell rolling,
        metastasis and inflammation for diagnosis and treatment of cancer,
        metastasis, leukemia, autoimmune disease and inflammation)
                     641644-37-3P
ΙT
     641641-60-3P
                                     641644-38-4P
                                                     641644-39-5P
                                                                    641644-40-8P
     641644-41-9P
                     641644-42-0P
                                     641644-44-2P
     RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
     DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL
     (Biological study); PREP (Preparation); USES (Uses)
        (amino acid sequence; antibodies specific to epitopes involving cell
        rolling, metastasis and inflammation for diagnosis and treatment of
        cancer, metastasis, leukemia, autoimmune disease and inflammation)
ΙT
     268723-76-8
                    268723-77-9
     RL: BSU (Biological study, unclassified); DGN (Diagnostic use); PRP
     (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (anti-platelet scFv Y1 CDR peptide; antibodies specific to epitopes
        involving cell rolling, metastasis and inflammation for diagnosis and
        treatment of cancer, metastasis, leukemia, autoimmune disease and
        inflammation)
     212783-31-8
IT
     RL: BSU (Biological study, unclassified); DGN (Diagnostic use); PRP
     (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (anti-platelet scFv Y1 CDR3 peptide; antibodies specific to epitopes
        involving cell rolling, metastasis and inflammation for diagnosis and
        treatment of cancer, metastasis, leukemia, autoimmune disease and
        inflammation)
     442527-61-9
IT
     RL: BSU (Biological study, unclassified); DGN (Diagnostic use); PRP
     (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (anti-platelet scFv Y17 CDR3 peptide; antibodies specific to epitopes
        involving cell rolling, metastasis and inflammation for diagnosis and
        treatment of cancer, metastasis, leukemia, autoimmune disease and
```

```
inflammation)
IT
     56-40-6, Glycine, biological studies 56-45-1, L-Serine, biological
               61-90-5, L-Leucine, biological studies
                                                        63-91-2,
     L-Phenylalanine, biological studies 73-32-5, L-Isoleucine, biological
              147-85-3, L-Proline, biological studies 956-46-7, L-Tyrosine
     studies
     O-sulfate 80498-17-5 84628-87-5, Restriction endonuclease NdeI
                   171040-76-9, Mocarhagin
     129430-53-1
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (antibodies specific to epitopes involving cell rolling, metastasis and
        inflammation for diagnosis and treatment of cancer, metastasis,
        leukemia, autoimmune disease and inflammation)
IT
     639019-58-2
                   639019-60-6
                                 639019-62-8
                                               639019-64-0
                                                              639019-66-2
     639019-68-4
                   639019-70-8
                                 639019-72-0
                                               639019-74-2
                                                              639019-76-4
     RL: BSU (Biological study, unclassified); DGN (Diagnostic use); PRP
     (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (antibodies specific to epitopes involving cell rolling, metastasis and
        inflammation for diagnosis and treatment of cancer, metastasis,
        leukemia, autoimmune disease and inflammation)
                                 50-35-1, Thalidomide
IT
     50-18-0, Cyclophosphamide
                                                         50-78-2, Aspirin
     53-03-2, Prednisone 53-86-1, Indomethacin 57-22-7, Vincristine
     127-07-1, Hydroxyurea 147-94-4, Cytarabine
                                                   305-03-3, Chlorambucil
     9004-54-0, Dextran, biological studies 9004-61-9,
     Hyaluronic acid 9041-08-1, Dalteparin sodium 10043-66-0,
     Iodine-131, biological studies 10098-91-6, Yttrium-90, biological
                                     13968-53-1, Ruthenium-103, biological
               11056-06-7, Bleomycin
     studies
               13981-56-1, Fluorine-18, biological studies 13982-78-0,
     studies
                                     14041-48-6, Thulium-165, biological
    Mercury-203, biological studies
              14119-09-6, Gallium-67, biological studies 14158-32-8,
     Iodine-126, biological studies 14331-95-4, Ruthenium-105, biological
               14390-71-7, Tellurium-122, biological studies 14391-22-1,
     studies
    Thulium-167, biological studies 14885-78-0, Indium-113, biological studies 14900-13-1, Thulium-168, biological studies 14932-42-4,
    Xenon-133, biological studies
                                    15307-86-5, Diclofenac
                                                             15663-27-1,
                  15687-27-1, Ibuprofen 15715-08-9, Iodine-123, biological
     cis-Platinum
              15750-15-9, Indium-111, biological studies 15756-62-4,
    Ruthenium-95, biological studies 15757-14-9, Gallium-68, biological studies 15758-35-7, Ruthenium-97, biological studies 15765-39-6,
     Bromine-77, biological studies 15776-20-2, Bismuth-213, biological
               20830-81-3, Daunorubicin 21442-01-3
                                                      21679-14-1, Fludarabine
     studies
     22204-53-1, Naproxen 23214-92-8, Doxorubicin
                                                      25316-40-9, Adriamycin
     30516-87-1, Zidovudine 33069-62-4, Taxol 35014-81-4, Rhenium-199,
    biological studies 38194-50-2, Sulindac
                                                 51146-56-6, Dexibuprofen
     51633-78-4, Mercury-167, biological studies 51692-52-5, Rhenium-201,
    biological studies 51692-56-9, Rhenium-205, biological studies
                                                        58957-92-9, Idarubicin
     51803-78-2, Nimesulide 52549-17-4, Pranoprofen
                            68206-94-0, Cloricromene
     59277-89-3, Acyclovir
                                                        73963-72-1, Cilostazol
     74397-12-9, Limaprost 74711-43-6, Zaltoprofen
                                                       75037-46-6, Gelonin
     75706-12-6, Leflunomide 80790-68-7 82410-32-0, Gancyclovir
     83712-60-1, Defibrotide 85622-93-1, Temozolomide
                                                          87344-06-7,
                        90101-16-9, Droxicam
    Amtolmetin quacil
                                                113440-58-7, Calicheamicin
     117989-72-7, Uro-Vaxom
                             162011-90-7, Rofecoxib
                                                      169590-42-5, Celecoxib
     173146-27-5, Denileukin diftitox 378253-17-9, Krypton-81m, biological
               378784-45-3, Technetium-99m, biological studies
                                                                 378784-46-4,
     Tellurium-121m, biological studies
                                         378784-50-0, Tellurium-125m,
                         425603-01-6, WinRho SDF
    biological studies
     RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU
     (Therapeutic use); BIOL (Biological study); USES (Uses)
        (antibodies specific to epitopes involving cell rolling, metastasis and
```

inflammation for diagnosis and treatment of cancer, metastasis,

```
leukemia, autoimmune disease and inflammation)
ΙT
     640723-68-8D, tyrosine-sulfated derivative
     RL: BSU (Biological study, unclassified); DGN (Diagnostic use); PRP
     (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (complement C4 epitope; antibodies specific to epitopes involving cell
        rolling, metastasis and inflammation for diagnosis and treatment of
        cancer, metastasis, leukemia, autoimmune disease and inflammation)
TT
     9001-26-7, Prothrombin 9005-49-6, Heparin, biological studies
     80295-48-3, Complement C4
     RL: BSU (Biological study, unclassified); DGN (Diagnostic use); PRP
     (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (epitope; antibodies specific to epitopes involving cell rolling,
        metastasis and inflammation for diagnosis and treatment of cancer,
        metastasis, leukemia, autoimmune disease and inflammation)
ΙT
     442528-35-0D, tyrosine-sulfated derivative
     RL: BSU (Biological study, unclassified); DGN (Diagnostic use); PRP
     (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (fibrinogen \gamma' epitope; antibodies specific to epitopes involving
        cell rolling, metastasis and inflammation for diagnosis and treatment
        of cancer, metastasis, leukemia, autoimmune disease and inflammation)
TΤ
     641644-43-1P
                    641644-45-3P
     RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
     DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL
     (Biological study); PREP (Preparation); USES (Uses)
        (nucleotide sequence; antibodies specific to epitopes involving cell
        rolling, metastasis and inflammation for diagnosis and treatment of
        cancer, metastasis, leukemia, autoimmune disease and inflammation)
     442528-30-5D, tyrosine-sulfated derivative
ΙT
     RL: BSU (Biological study, unclassified); DGN (Diagnostic use); PRP
     (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (platelet surface protein epitope; antibodies specific to epitopes
        involving cell rolling, metastasis and inflammation for diagnosis and
        treatment of cancer, metastasis, leukemia, autoimmune disease and
        inflammation)
ΙT
     9001-92-7, Endoproteinase
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (protease; antibodies specific to epitopes involving cell rolling,
       metastasis and inflammation for diagnosis and treatment of cancer,
       metastasis, leukemia, autoimmune disease and inflammation)
                               641648-07-9
IT
     641648-05-7
                  641648-06-8
                                             641648-08-0
                                                           641648-09-1
     641648-10-4
                  641648-11-5
                                              641648-13-7
                                                            641648-14-8
                                641648-12-6
                                641648-17-1
                                              641648-18-2
                                                            641648-19-3
     641648-15-9
                  641648-16-0
     641648-20-6
                  641648-21-7
                                641665-56-7
     RL: PRP (Properties)
        (unclaimed nucleotide sequence; antibodies specific to epitopes
        involving cell rolling, metastasis and inflammation for diagnosis and
        treatment of cancer, metastasis, leukemia, autoimmune disease and
        inflammation)
IT
     641647-25-8
                  641647-26-9
                                 641647-27-0
                                              641647-28-1
                                                             641647-29-2
                  641647-31-6
                                641647-32-7
                                              641647-33-8
                                                            641647-34-9
     641647-30-5
     641647-35-0 641647-36-1
                                641647-37-2
                                              641647-38-3
                                                            641647-39-4
     641647-40-7 641647-41-8
                                641647-42-9
                                              641647-43-0 641647-44-1
     641647-45-2 641647-46-3
                                641647-47-4
                                              641647-48-5
                                                            641647-49-6
     641647-50-9 641647-51-0
                                641647-52-1
                                              641647-53-2
                                                            641647-54-3
                                              641647-58<del>-</del>7
                                                            641647-59-8
     641647-55-4 641647-56-5
                                641647-57-6
                                             641647-63-4 641647-64-5
     641647-60-1 641647-61-2
                                641647-62-3
     641647-65-6 641647-66-7
                               641647-67-8
                                             641647-68-9 641647-69-0
     641647-70-3 641647-71-4 641647-72-5
                                              641647-73-6 641647-74-7
     641647-75-8 641647-76-9
                                641647-77-0
                                             641647-78-1 641647-79-2
```

```
641647-80-5
                   641647-81-6
                                 641647-82-7
                                               641647-83-8
                                                              641647-84-9
     641647-85-0
                   641647-86-1
                                 641647-87-2
                                               641647-88-3
                                                              641647-89-4
     641647-90-7
                   641647-91-8
                                 641647-92-9
                                               641647-93-0
                                                              641647-94-1
     641647-95-2
                   641647-96-3
                                 641647-97-4
                                               641647-98-5
                                                              641647-99-6
     641648-00-2
                   641648-01-3
                                 641648-02-4
                                               641648-03-5
                                                              641648-04-6
     642103-96-6
     RL: PRP (Properties)
        (unclaimed protein sequence; antibodies specific to epitopes involving
        cell rolling, metastasis and inflammation for diagnosis and treatment
        of cancer, metastasis, leukemia, autoimmune disease and inflammation)
IT
     122024-47-9
                   149298-29-3
                                 245330-86-3
                                               245330-96-5
                                                              245331-07-1
     245331-15-1
                   245331-22-0
                                 245331-32-2
                                               245331-36-6
                                                              245331-39-9
     245331-51-5
                   245331-68-4
                                 245331-74-2
                                               245332-10-9
                                                              245333-35-1
     245333-43-1
                   245333-53-3
                                 245333-62-4
                                               245333-65-7
                                                              245333-66-8
     245333-74-8
                   245333-75-9
                                 245333-76-0
                                               245333-82-8
                                                              245333-90-8
     245333-98-6
                   245334-15-0
                                 245334-24-1
                                               245334-37-6
                                                              245334-46-7
     245334-69-4
                   245334-81-0
                                 245334-95-6
                                               245335-03-9
                                                              245335-22-2
     245335-28-8
                   245335-54-0
                                 245336-31-6
                                               245448-41-3
                                                              245448-42-4
     245448-43-5
                   245448-44-6
                                 245448-45-7
                                               245448-46-8
                                                              245448-47-9
     245448-48-0
                   245448-49-1
                                 245448-50-4
                                               245448-51-5
                                                              245448-52-6
     245448-53-7
                   245448-54-8
                                 245448-55-9
                                               245448-56-0
                                                              245448-57-1
     245448-58-2
                   245448-59-3
                                 245448-60-6
                                               245448-61-7
                                                              245448-62-8
     245448-95-7
                   245448-96-8
                                 245448-97-9
                                               245448-98-0
                                                              245448-99-1
     245449-00-7
                   245449-01-8
                                 245449-02-9
                                               245449-03-0
                                                              245449-04-1
     245449-05-2
                   245449-06-3
                                 245449-07-4
                                               245449-08-5
                                                              245449-09-6
     245449-10-9
                   245449-11-0
                                 245449-12-1
                                               245449-13-2
                                                              245449-15-4
     268723-83-7
                  442527-49-3
                                 442527-50-6
                                               442527-51-7
                                                             442527-53-9
                 442527-55-1
                                                            442527-58-4
     442527-54-0
                                 442527-56-2
                                               442527-57-3
     442527-59-5
                  442527-60-8 442527-62-0
                                               442527-63-1
                                                             442527-64-2
                                              442527-70-0
     442527-65-3
                  442527-68-6
                                 442527-69-7
                                                              442527-71-1
                                 442527-74-4
                                              442527-76-6
     442527-72-2
                   442527-73-3
                                                             444882-10-4
                 641616-77-5
     640723-97-3
     RL: PRP (Properties)
        (unclaimed sequence; antibodies specific to epitopes involving cell
        rolling, metastasis and inflammation for diagnosis and treatment of
        cancer, metastasis, leukemia, autoimmune disease and inflammation)
IΤ
     53-03-2, Prednisone 9004-61-9, Hyaluronic acid
     RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU
     (Therapeutic use); BIOL (Biological study); USES (Uses)
        (antibodies specific to epitopes involving cell rolling, metastasis and
        inflammation for diagnosis and treatment of cancer, metastasis,
        leukemia, autoimmune disease and inflammation)
RN
     53-03-2 HCAPLUS
     Pregna-1,4-diene-3,11,20-trione, 17,21-dihydroxy- (8CI, 9CI) (CA INDEX
CN
     NAME)
```

Absolute stereochemistry.

RN 9004-61-9 HCAPLUS

CN Hyaluronic acid (8CI, 9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

L46 ANSWER 9 OF 65 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2004:3463 HCAPLUS

DN 140:75946

ED Entered STN: 04 Jan 2004

TI Multimers of peptide epitopes containing sulfated moieties, antibodies to such epitopes, and diagnostic and therapeutic uses thereof

IN Levanon, Avigdor; Hagay, Yocheved; Plaksin, Daniel; Vogel, Tikva; Nimrod, Abraham; Mar-Haim, Hagit; Szanthon, Ester; Richter, Tamar; Amit, Boaz; Cooperman, Lena; Peretz, Tuvia; Lazarovits, Janette

PA Israel

SO U.S. Pat. Appl. Publ., 149 pp., Cont.-in-part of U.S. Provisonal Ser. No. 258,948.

CODEN: USXXCO

DT Patent

LA English

IC ICM A61K039-395

ICS C07K014-46

NCL 424178100; 530391100

CC 15-2 (Immunochemistry)

Section cross-reference(s): 1, 3, 14, 63

FAN.CNT 5

FAN.	CNT 5											
	PATENT NO.		KIND	DATE	APPLICATION NO.	DATE						
		<del>-</del>										
ΡI	US 20040018	A1	20040101	US 2001-29988	20011231							
	US 20040730	11	A1	20040415	US 2001-29926	20011231						
PRAI	US 2000-258	948P	P	20001229								
CLAS	SS											
PATENT NO. CLASS			PATENT FAMILY CLASSIFICATION CODES									
US	2004001839	ICM	A61K039	9-395								
ICS			C07K014-46									
		NCL	424178100; 530391100									
US	US 2004001839 ECLA		C07K014/47A11; C07K016/30M									
US	2004073011	ECLA	C07K016/00A; C07K016/30M									
OC MARRAY 140.75046												

OS MARPAT 140:75946

AB The present invention provides epitopes present on cancer cells and important in physiol. phenomena such as cell rolling, metastasis, and inflammation. Therapeutic and diagnostic methods and compns. using antibodies capable of binding to the epitopes are provided. Methods and compns. according to the present invention can be used in diagnosis of and

therapy for such diseases as cancer, including tumor growth and metastasis, leukemia, autoimmune disease, and inflammatory disease. The preferred epitope comprises a peptide with a sulfated tyrosine or a peptide conjugate with a sulfated carbohydrate or a sulfated lipid mol. The invention provides sequences for peptide epitopes and for human antibody clones directed against a sulfated epitope. Epitopes of the invention are found on human glycoproteins GPIb in CD42 and P-Selectin Glycoprotein Ligand-1 (PSGL-1) and on certain diseased cells, such as B-CLL cells, AML cells, multiple myeloma cells, and B-CLL cells. Two human leukemia models were developed in immunodeficient mice. In the first model, SCID mice were injected with MOLT-4 cells from a human T cell leukemia and later with a conjugate between scFv CONY1 and doxorubicin. Tumor growths in the mouse livers weighed significantly less in mice treated with the CONY1-doxorubicin conjugate and the percentage of MOLT-4 cells found in bone marrow was low. In the second model, the conjugate between scFv CONY1 and doxorubicin significantly reduced the number of tumor cells in bone marrow of SCID/NOD mice that were injected with KG-1 cells from a human AML cell line. pharmacokinetics of 125I-labeled CONY1 in BALB-C mice were determined human sulfated peptide epitope antibody diagnosis therapy leukemia disease; protein sequence human sulfated epitope antibody

IT B cell (lymphocyte)

(B-CLL cell, antibody binding; multimers of peptide epitopes containing sulfated moieties, antibodies to such epitopes, and diagnostic and therapeutic uses thereof)

IT Glycoproteins

RL: ANT (Analyte); ANST (Analytical study) (GPIb, GPlbα; multimers of peptide epitopes containing sulfated moieties, antibodies to such epitopes, and diagnostic and therapeutic uses thereof)

IT Glycoproteins

RL: ANT (Analyte); ANST (Analytical study)
(PSGL-1 (P-selectin glycoprotein ligand-1); multimers of peptide
epitopes containing sulfated moieties, antibodies to such epitopes, and
diagnostic and therapeutic uses thereof)

IT Mus

 $(T-ALL\ (MOLT4)\ and\ AML-KG1\ models;$  multimers of peptide epitopes containing sulfated moieties, antibodies to such epitopes, and diagnostic and therapeutic uses thereof)

IT Leukemia

(acute myelogenous, cells, antibody binding; multimers of peptide epitopes containing sulfated moieties, antibodies to such epitopes, and diagnostic and therapeutic uses thereof)

IT Platelet (blood)

(adhesion; multimers of peptide epitopes containing sulfated moieties, antibodies to such epitopes, and diagnostic and therapeutic uses thereof)

IT Platelet (blood)

(aggregation; multimers of peptide epitopes containing sulfated moieties, antibodies to such epitopes, and diagnostic and therapeutic uses thereof)

IT Anti-inflammatory agents
Antibacterial agents

Antiviral agents

Cardiovascular agents

Immunomodulators

Thrombolytics

(antibody conjugates; multimers of peptide epitopes containing sulfated moieties, antibodies to such epitopes, and diagnostic and

therapeutic uses thereof)

IT Radionuclides, biological studies

Toxins

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (antibody conjugates; multimers of peptide epitopes containing sulfated moieties, antibodies to such epitopes, and diagnostic and therapeutic uses thereof)

IT Multiple myeloma

(cells, antibody binding; multimers of peptide epitopes containing sulfated moieties, antibodies to such epitopes, and diagnostic and therapeutic uses thereof)

IT Leukemia

(chronic lymphocytic, cells, antibody binding; multimers of peptide epitopes containing sulfated moieties, antibodies to such epitopes, and diagnostic and therapeutic uses thereof)

IT Antibodies and Immunoglobulins

RL: ARG (Analytical reagent use); PRP (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses) (fragments, antigen binding site, Y1-CysKAK; multimers of peptide epitopes containing sulfated moieties, antibodies to such epitopes, and diagnostic and therapeutic uses thereof)

IT Glycoproteins

RL: ANT (Analyte); ANST (Analytical study)
(glycocalicins; multimers of peptide epitopes containing sulfated moieties, antibodies to such epitopes, and diagnostic and therapeutic uses thereof)

IT Drug delivery systems

(immunoconjugates; multimers of peptide epitopes containing sulfated moieties, antibodies to such epitopes, and diagnostic and therapeutic uses thereof)

IT Drug delivery systems

(immunotoxins; multimers of peptide epitopes containing sulfated moieties, antibodies to such epitopes, and diagnostic and therapeutic uses thereof)

IT Cell proliferation

(inhibition; multimers of peptide epitopes containing sulfated moieties, antibodies to such epitopes, and diagnostic and therapeutic uses thereof)

IT Adhesion, biological

(inhibitor; multimers of peptide epitopes containing sulfated moieties, antibodies to such epitopes, and diagnostic and therapeutic uses thereof)

IT Drug delivery systems

(liposomes; multimers of peptide epitopes containing sulfated moieties, antibodies to such epitopes, and diagnostic and therapeutic uses thereof)

IT Proteoglycans, analysis

RL: ANT (Analyte); ANST (Analytical study)

(lumicans; multimers of peptide epitopes containing sulfated moieties, antibodies to such epitopes, and diagnostic and therapeutic uses thereof)

IT Animal cell

(metastatic, antibody binding; multimers of peptide epitopes containing sulfated moieties, antibodies to such epitopes, and diagnostic and therapeutic uses thereof)

IT Antibodies and Immunoglobulins

RL: ARG (Analytical reagent use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(multimer antigen binding sites; multimers of peptide epitopes containing

```
sulfated moieties, antibodies to such epitopes, and diagnostic and
        therapeutic uses thereof)
IT
     Antitumor agents
     Autoimmune disease
     Cardiovascular system, disease
     Disease models
     Epitopes
     Human
     Inflammation
     Leukemia
     Molecular association
     Protein sequences
     Test kits
     Tumor markers
     cDNA sequences
        (multimers of peptide epitopes containing sulfated moieties, antibodies to
        such epitopes, and diagnostic and therapeutic uses thereof)
IT
     Peptides, biological studies
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (pentapeptides, linker; multimers of peptide epitopes containing
        sulfated moieties, antibodies to such epitopes, and diagnostic and
        therapeutic uses thereof)
IT
     Adhesion, biological
     Cell aggregation
        (platelet; multimers of peptide epitopes containing sulfated moieties,
        antibodies to such epitopes, and diagnostic and therapeutic uses
        thereof)
IT
     Drug delivery systems
        (polymer-bound; multimers of peptide epitopes containing sulfated moieties,
        antibodies to such epitopes, and diagnostic and therapeutic uses
        thereof)
ΙT
     Artery, disease
        (restenosis; multimers of peptide epitopes containing sulfated moieties,
        antibodies to such epitopes, and diagnostic and therapeutic uses
        thereof)
     Antibodies and Immunoglobulins
IT
     RL: ARG (Analytical reagent use); PAC (Pharmacological activity); PRP
     (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL
     (Biological study); USES (Uses)
        (single chain, Y1 and Y17; multimers of peptide epitopes containing
        sulfated moieties, antibodies to such epitopes, and diagnostic and
        therapeutic uses thereof)
IT
     Functional groups
        (sulfate; multimers of peptide epitopes containing sulfated moieties,
        antibodies to such epitopes, and diagnostic and therapeutic uses
        thereof)
IT
     Glycoproteins
     RL: ANT (Analyte); ANST (Analytical study)
        (sulfoglycoproteins; multimers of peptide epitopes containing sulfated
        moieties, antibodies to such epitopes, and diagnostic and therapeutic
        uses thereof)
ΙT
     Interferons
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (α, antibody conjugates; multimers of peptide epitopes
        containing sulfated moieties, antibodies to such epitopes, and diagnostic
        and therapeutic uses thereof)
IT
     Fibrinogens
     RL: ANT (Analyte); ANST (Analytical study)
```

 $(\gamma \text{ chain, } \gamma'; \text{ multimers of peptide epitopes containing sulfated})$ 

```
moieties, antibodies to such epitopes, and diagnostic and therapeutic
        uses thereof)
ΙT
     641646-80-2D, conjugates
     RL: ARG (Analytical reagent use); PAC (Pharmacological activity); PKT
     (Pharmacokinetics); PRP (Properties); THU (Therapeutic use); ANST
     (Analytical study); BIOL (Biological study); USES (Uses)
        (amino acid sequence; multimers of peptide epitopes containing sulfated
        moieties, antibodies to such epitopes, and diagnostic and therapeutic
        uses thereof)
     641646-76-6
ΤТ
                   641646-78-8
                                 641646-79-9
     RL: ARG (Analytical reagent use); PRP (Properties); THU (Therapeutic use);
     ANST (Analytical study); BIOL (Biological study); USES (Uses)
        (amino acid sequence; multimers of peptide epitopes containing sulfated
        moieties, antibodies to such epitopes, and diagnostic and therapeutic
        uses thereof)
IT
     9004-54-0, Dextrans, biological studies
                                               21442-01-3
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (drug carrier; multimers of peptide epitopes containing sulfated moieties,
        antibodies to such epitopes, and diagnostic and therapeutic uses
        thereof)
ΙT
     212783-31-8
                   268723-76-8
                                 268723-77-9
                                               442527-61-9
     RL: ARG (Analytical reagent use); PRP (Properties); THU (Therapeutic use);
     ANST (Analytical study); BIOL (Biological study); USES (Uses)
        (human sulfated epitope antibody hypervariable region; multimers of
        peptide epitopes containing sulfated moieties, antibodies to such epitopes,
        and diagnostic and therapeutic uses thereof)
     60-18-4D, L-Tyrosine, sulfated 9001-26-7, Prothrombin
ΙT
                                                               9005-49-6
                         39346-44-6, Inter-\alpha-trypsin inhibitor
     Heparin, analysis
     80295-48-3, Complement C4
                                 442528-30-5
                                              442528-31-6
                                                           442528-33-8
                                               639862-76-3
     442528-34-9
                   442528-35-0
                                 639862-69-4
     RL: ANT (Analyte); ANST (Analytical study)
        (multimers of peptide epitopes containing sulfated moieties, antibodies to
        such epitopes, and diagnostic and therapeutic uses thereof)
     10043-66-0D, Iodine-131, antibody conjugates, biological studies
IT
     10098-91-6D, Yttrium-90, antibody conjugates, biological studies
     13968-53-1D, Ruthenium-103, antibody conjugates, biological
               13981-56-1D, Fluorine-18, antibody conjugates,
     studies
                          13982-78-0D, Mercury-203, antibody conjugates
     biological studies
                            14041-48-6D, Thulium-165, antibody
     , biological studies
     conjugates, biological studies
                                     14119-09-6D, Gallium-67, antibody
                                      14158-32-8D, Iodine-126, antibody
     conjugates, biological studies
     conjugates, biological studies
                                     14331-95-4D, Ruthenium-105,
     antibody conjugates, biological studies
                                              14378-26-8D, Rhenium,
     isotope of mass 188, antibody conjugates, biological studies
     14390-71-7D, Tellurium-122, antibody conjugates, biological
              14391-22-1D, Thulium-167, antibody conjugates,
    biological studies
                          14834-67-4D, Iodine-133, antibody conjugates
     , biological studies
                            14885-78-0D, Indium-113, antibody
     conjugates, biological studies
                                     14900-13-1D, Thulium-168,
     antibody conjugates, biological studies
                                              14932-42-4D,
     Xenon-133, antibody conjugates, biological studies
     14998-63-1D, Rhenium, isotope of mass 186, antibody conjugates,
    biological studies
                          15715-08-9D, Iodine-123, antibody conjugates
                          15750-15-9D, Indium-111, antibody
     , biological studies
     conjugates, biological studies
                                     15756-62-4D, Ruthenium-95,
     antibody conjugates, biological studies
                                              15757-14-9D,
     Gallium-68, antibody conjugates, biological studies
     15758-35-7D, Ruthenium-97, antibody conjugates, biological
```

```
15765-39-6D, Bromine-77, antibody conjugates,
     biological studies 15776-20-2D, Bismuth-213, antibody conjugates
     , biological studies
                            33455-08-2D, Mercury-207, antibody
     conjugates, biological studies
                                      378253-17-9D, Krypton-81m,
     antibody conjugates, biological studies
                                               378784-45-3D,
     Technetium-99m, antibody conjugates, biological studies
     378784-46-4D, Tellurium-121m, antibody conjugates, biological
               378784-50-0D, Tellurium-125m, antibody conjugates,
     studies
     biological studies
     RL: ARG (Analytical reagent use); THU (Therapeutic use); ANST (Analytical
     study); BIOL (Biological study); USES (Uses)
        (multimers of peptide epitopes containing sulfated moieties, antibodies to
        such epitopes, and diagnostic and therapeutic uses thereof)
TΤ
     58-85-5D, Biotin, conjugated with antigen binding fragments
     9013-20-1D, Streptavidin, conjugated with antigen binding
     fragments
     RL: ARU (Analytical role, unclassified); BUU (Biological use,
     unclassified); ANST (Analytical study); BIOL (Biological study); USES
        (multimers of peptide epitopes containing sulfated moieties, antibodies to
        such epitopes, and diagnostic and therapeutic uses thereof)
ΙT
     2543-43-3
     RL: BUU (Biological use, unclassified); PRP (Properties); BIOL (Biological
     study); USES (Uses)
        (multimers of peptide epitopes containing sulfated moieties, antibodies to
        such epitopes, and diagnostic and therapeutic uses thereof)
     50-18-0D, Cyclophosphamide, antibody conjugates
IT
                                                      50-35-1D,
                                       50-78-2D, Aspirin, antibody
     Thalidomide, antibody conjugates
     conjugates 53-03-2D, Prednisone, antibody
                  53-86-1D, Indomethacin, antibody conjugates
     conjugates
     57-22-7D, Vincristine, antibody conjugates 127-07-1D,
    Hydroxyurea, antibody conjugates 147-94-4D, Cytarabine, antibody conjugates 305-03-3D, Chlorambucil, antibody
     conjugates 9004-61-9D, Hyaluronic acid,
                          9041-08-1D, Dalteparin sodium, antibody
     antibody conjugates
                  11056-06-7D, Bleomycin, antibody conjugates
     conjugates
     15307-86-5D, Diclofenac, antibody conjugates 15663-27-1D,
     cis-Platinum, antibody conjugates 15687-27-1D, Ibuprofen,
                          20830-81-3D, Daunorubicin, antibody
     antibody conjugates
     conjugates
                  21679-14-1D, Fludarabine, antibody conjugates
     22204-53-1D, Naproxen, antibody conjugates
                                                  23214-92-8D,
     Doxorubicin, antibody conjugates 25316-40-9D, Adriamycin,
                           30516-87-1D, Zidovudine, antibody
    antibody conjugates
                  33069-62-4D, Taxol, antibody conjugates
    conjugates
     38194-50-2D, Sulindac, antibody conjugates 51146-56-6D,
     Dexibuprofen, antibody conjugates 51803-78-2D, Nimesulide,
                          52549-17-4D, Pranoprofen, antibody
    antibody conjugates
                  58957-92-9D, Idarubicin, antibody conjugates
    conjugates
    59277-89-3D, Acyclovir, antibody conjugates
                                                   73963-72-1D,
    Cilostazol, antibody conjugates
                                      74397-12-9D, Limaprost,
                          74711-43-6D, Zaltoprofen, antibody
    antibody conjugates
                 75706-12-6D, Leflunomide, antibody conjugates
    conjugates
    80790-68-7D, Morpholinodoxorubicin, antibody conjugates
     82410-32-0D, Ganciclovir, antibody conjugates 83712-60-1D,
    Defibrotide, antibody conjugates 85622-93-1D, Temozolomide,
    antibody conjugates
                           87344-06-7D, antibody conjugates
     90101-16-9D, Droxicam, antibody conjugates
                                                 113440-58-7D,
    Calicheamicin, antibody conjugates
                                         162011-90-7D, Rofecoxib,
    antibody conjugates 169590-42-5D, Celecoxib, antibody
```

```
173146-27-5D, Denileukin diftitox, antibody
     conjugates
                  262423-20-1D, Subreum, antibody conjugates
     conjugates
     425603-01-6D, WinRho SDF, antibody conjugates
                                                       640734-07-2D,
     Clorcromene, antibody conjugates
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (multimers of peptide epitopes containing sulfated moieties, antibodies to
        such epitopes, and diagnostic and therapeutic uses thereof)
ΙT
     641646-77-7
                    641646-81-3
     RL: ARG (Analytical reagent use); PRP (Properties); THU (Therapeutic use);
     ANST (Analytical study); BIOL (Biological study); USES (Uses)
        (nucleotide sequence; multimers of peptide epitopes containing sulfated
        moieties, antibodies to such epitopes, and diagnostic and therapeutic
        uses thereof)
IT
     641650-93-3
                   641650-94-4
                                  641650-95-5
                                                 641650-96-6
                                                               641650-97-7
                                  641651-00-5
                                                 641651-01-6
                                                               641651-02-7
     641650-98-8
                    641650-99-9
                                  641651-05-0
                                                 641651-06-1
                                                               641651-07-2
     641651-03-8
                   641651-04-9
                                                               641651-12-9
     641651-08-3
                    641651-09-4
                                  641651-10-7
                                                 641651-11-8
                                                               641651-17-4
     641651-13-0
                    641651-14-1
                                  641651-15-2
                                                 641651-16-3
     641651-18-5
                    641651-19-6
                                  641651-20-9
                                                 641651-21-0
                                                               641651-22-1
                                                               641651-27-6
     641651-23-2
                    641651-24-3
                                  641651-25-4
                                                 641651-26-5
                                                 641651-31-2
                                                               641651-32-3
     641651-28-7
                    641651-29-8
                                  641651-30-1
     641651-33-4
                    641651-34-5
                                  641651-35-6
                                                 641651-36-7
                                                               641651-37-8
     641651-38-9
                    641651-39-0
                                  641651-40-3
                                                 641651-41-4
                                                               641651-42-5
                                                               641651-47-0
     641651-43-6
                   641651-44-7
                                  641651-45-8
                                                 641651-46-9
     641651-48-1
                   641651-49-2
                                  641651-50-5
                                                 641651-51-6
                                                               641651-52-7
     641651-53-8
                   641651-54-9
                                  641651-55-0
                                                 641651-56-1
                                                               641651-57-2
                                                               641651-62-9
     641651-58-3
                   641651-59-4
                                  641651-60-7
                                                 641651-61-8
                                                               641651-67-4
     641651-63-0
                   641651-64-1
                                  641651-65-2
                                                 641651-66-3
                                  641651-70-9
                                                 641651-71-0
                                                               641651-72-1
     641651-68-5
                   641651-69-6
     641651-73-2
                   641653-14-7
     RL: PRP (Properties)
        (unclaimed protein sequence; multimers of peptide epitopes containing
        sulfated moieties, antibodies to such epitopes, and diagnostic and
        therapeutic uses thereof)
ΙT
     122024-47-9
                   149298-29-3
                                  245330-86-3
                                                 245330-96-5
                                                               245331-07-1
     245331-15-1
                    245331-22-0
                                  245331-32-2
                                                 245331-36-6
                                                               245331-39-9
                   245331-68-4
                                  245331-74-2
                                                 245332-10-9
                                                               245333-35-1
     245331-51-5
                   245333-53-3
                                  245333-62-4
                                                 245333-65-7
                                                               245333-66-8
     245333-43-1
                    245333-75-9
                                  245333-76-0
                                                 245333-82-8
                                                               245333-90-8
     245333-74-8
                                  245334-24-1
                                                 245334-37-6
                                                               245334-46-7
     245333-98-6
                   245334-15-0
     245334-69-4
                   245334-81-0
                                  245334-95-6
                                                 245335-03-9
                                                               245335-22-2
                                                 245448-41-3
                                                               245448-42-4
     245335-28-8
                   245335-54-0
                                  245336-31-6
                                  245448-45-7
                                                 245448-46-8
                                                               245448-47-9
     245448-43-5
                   245448-44-6
                                  245448-50-4
                                                 245448-51-5
                                                               245448-52-6
     245448-48-0
                   245448-49-1
                                  245448-55-9
                                                 245448-56-0
                                                               245448-57-1
     245448-53-7
                    245448-54-8
     245448-58-2
                    245448-59-3
                                  245448-60-6
                                                 245448-61-7
                                                               245448-62-8
     245448-95-7
                    245448-96-8
                                  245448-97-9
                                                 245448-98-0
                                                               245448-99-1
     245449-00-7
                    245449-01-8
                                  245449-02-9
                                                 245449-03-0
                                                               245449-04-1
                                                               245449-09-6
     245449-05-2
                   245449-06-3
                                  245449-07-4
                                                 245449-08-5
                                                               245449-15-4
     245449-10-9
                    245449-11-0
                                  245449-12-1
                                                 245449-13-2
     268723-83-7
                    442527-49-3
                                  442527-50-6
                                                 442527-51-7
                                                               442527-53-9
                                                 442527-57-3
                                                               442527-58-4
     442527-54-0
                    442527-55-1
                                  442527-56-2
                                                               442527-64-2
     442527-59-5
                    442527-60-8
                                  442527-62-0
                                                 442527-63-1
                                                               442527-69-7
                                  442527-67-5
                                                 442527-68-6
     442527-65-3
                    442527-66-4
                                                 442527-73-3
                                                               442527-74-4
     442527-70-0
                    442527-71-1
                                  442527-72-2
                                                               641653-17-0
     442527-76-6
                    444882-10-4
                                  641653-15-8
                                                 641653-16-9
                                  641653-20-5
                                                 641653-21-6
                                                               641653-22-7
     641653-18-1
                    641653-19-2
                                                 641653-26-1
                                                               641653-27-2
     641653-23-8
                    641653-24-9
                                  641653-25-0
                                                 641653-31-8
                                                               641653-32-9
                                  641653-30-7
     641653-28-3
                    641653-29-4
```

641653-33-0 641653-34-1

RL: PRP (Properties)

(unclaimed sequence; multimers of peptide epitopes containing sulfated moieties, antibodies to such epitopes, and diagnostic and therapeutic uses thereof)

IT 53-03-2D, Prednisone, antibody conjugates

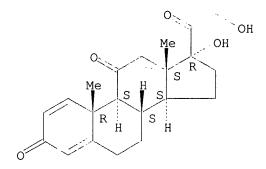
9004-61-9D, Hyaluronic acid, antibody conjugates

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (multimers of peptide epitopes containing sulfated moieties, antibodies to such epitopes, and diagnostic and therapeutic uses thereof)

RN 53-03-2 HCAPLUS

CN Pregna-1,4-diene-3,11,20-trione, 17,21-dihydroxy- (8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 9004-61-9 HCAPLUS

CN Hyaluronic acid (8CI, 9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

L46 ANSWER 10 OF 65 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2003:951172 HCAPLUS

DN 140:24421

ED Entered STN: 07 Dec 2003

 ${\tt TI}$  Gene expression profiles in response to toxic compounds and their use as kidney toxicity predictive genes

IN Kier, Larry; Nolan, Timothy D.; Sankar, Usha; Derbel, Maher

PA Phase-1 Molecular Toxicology, Inc., USA

SO PCT Int. Appl., 388 pp.

CODEN: PIXXD2

DT Patent

LA English

IC ICM C12N

CC 4-1 (Toxicology)

Section cross-reference(s): 3

ENN CNT 1

FAN.CNT 1																		
	PATENT NO.					KIN	D	DATE		i	APPL	ICAT	ION	. 00		D	ATE	
ΡI	WO 2003100030				A2 20031204			WO 2003-US6196					20030227					
		W:	ΑE,	AG,	AL,	AM,	ΑT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	ΒZ,	CA,	CH,	CN,
			CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,
			GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	ΚP,	KR,	ΚZ,	LC,	LK,	LR,
			LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	ΝZ,	OM,	PH,
			PL,	PT,	RO,	RU,	SD,	SE,	SG,	SK,	SL,	ТJ,	TM,	TN,	TR,	TT,	ΤZ,	UA,
			UG,	US,	UZ,	VN,	YU,	ZA,	ZM,	zw								

```
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
PRAI US 2002-361128P
                           Ρ
                                  20020227
CLASS
 PATENT NO.
              CLASS PATENT FAMILY CLASSIFICATION CODES
 _____ ___
                         ______
 WO 2003100030 ICM C12N
     The invention provides kidney toxicity predictive genes which can be used
     to predict kidney toxicity in response to one or more agents. Multiple
     sets of kidney toxicity biomarkers are provided which are useful in the
     kidney toxicity prediction methods. In particular, 376 rat kidney
     toxicity gene expression markers demonstrate utility in predicting kidney
     toxicity outcomes. These biomarkers are thoroughly characterized for
     predictive performance; among the subsets of kidney toxicity genes
     provided herein are several which demonstrate prediction accuracies in the
     vicinity of 95%.
     kidney toxicity gene expression marker prediction
ST
TΤ
     Thioredoxins
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (1 and 2; gene expression profiles in response to toxic compds. and
        their use as kidney toxicity predictive genes)
IT
     Proteins
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (14-3-3\zeta); gene expression profiles in response to toxic compds.
        and their use as kidney toxicity predictive genes)
ΙΤ
     Proteins
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (25-DX; gene expression profiles in response to toxic compds. and their
        use as kidney toxicity predictive genes)
TΤ
     Uncoupling protein
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (2; gene expression profiles in response to toxic compds. and their use
        as kidney toxicity predictive genes)
ΙT
     Connexins
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (32; gene expression profiles in response to toxic compds. and their
        use as kidney toxicity predictive genes)
IΤ
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (ARL184 (ADP-ribosylation factor-like, 184); gene expression profiles
        in response to toxic compds. and their use as kidney toxicity
        predictive genes)
     Transcription factors
TT
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (ATF-3 (activating transcription factor 3); gene expression profiles in
        response to toxic compds. and their use as kidney toxicity predictive
        genes)
ΙT
     Proteins
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
```

(ATP-stimulated glucocorticoid-receptor translocation promoter; gene expression profiles in response to toxic compds. and their use as kidney toxicity predictive genes) TΤ Proteins RL: BSU (Biological study, unclassified); BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (Bax; gene expression profiles in response to toxic compds. and their use as kidney toxicity predictive genes) IT Proteins RL: BSU (Biological study, unclassified); BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (Bcl-2; gene expression profiles in response to toxic compds. and their use as kidney toxicity predictive genes) ΙT Apolipoproteins RL: BSU (Biological study, unclassified); BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (C-III; gene expression profiles in response to toxic compds. and their use as kidney toxicity predictive genes) IT Chemokine receptors RL: BSU (Biological study, unclassified); BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (CCR2; gene expression profiles in response to toxic compds. and their use as kidney toxicity predictive genes) ΙT Chemokine receptors RL: BSU (Biological study, unclassified); BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (CCR5; gene expression profiles in response to toxic compds. and their use as kidney toxicity predictive genes) ΙT Proteins RL: BSU (Biological study, unclassified); BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (CD44 metastasis suppressor; gene expression profiles in response to toxic compds. and their use as kidney toxicity predictive genes) TΤ Proteins RL: BSU (Biological study, unclassified); BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (CDK102; gene expression profiles in response to toxic compds. and their use as kidney toxicity predictive genes) TΤ Proteins RL: BSU (Biological study, unclassified); BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (CDK108; gene expression profiles in response to toxic compds. and their use as kidney toxicity predictive genes) TΤ Chemokine receptors RL: BSU (Biological study, unclassified); BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (CXCR4; gene expression profiles in response to toxic compds. and their use as kidney toxicity predictive genes) TΤ Cyclins RL: BSU (Biological study, unclassified); BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (D1; gene expression profiles in response to toxic compds. and their use as kidney toxicity predictive genes) ΙT Proteins RL: BSU (Biological study, unclassified); BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (DAD1 (defender against cell death 1); gene expression profiles in response to toxic compds. and their use as kidney toxicity predictive genes)

```
ΙT
     Calbindins
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (D9k; gene expression profiles in response to toxic compds. and their
        use as kidney toxicity predictive genes)
ΙT
     Selectins
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (E-; gene expression profiles in response to toxic compds. and their
        use as kidney toxicity predictive genes)
ΙT
     Cyclins
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (E; gene expression profiles in response to toxic compds. and their use
        as kidney toxicity predictive genes)
ΙT
     Cyclins
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (G; gene expression profiles in response to toxic compds. and their use
        as kidney toxicity predictive genes)
IΤ
     Transcription factors
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (GADD153; gene expression profiles in response to toxic compds. and
        their use as kidney toxicity predictive genes)
IT
     Proteins
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (GADD45; gene expression profiles in response to toxic compds. and
        their use as kidney toxicity predictive genes)
IT
     Transport proteins
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (GLUT-1 (glucose transporter 1); gene expression profiles in response
        to toxic compds. and their use as kidney toxicity predictive genes)
ΙT
     Proteins
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (GRP78 (glucose-regulated protein, 78 kDa); gene expression
        profiles in response to toxic compds. and their use as kidney toxicity
        predictive genes)
    Ferritins
TΤ
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (H-chain; gene expression profiles in response to toxic compds. and
        their use as kidney toxicity predictive genes)
     Transcription factors
IT
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (HIF-1\alpha (hypoxia-inducible factor 1\alpha); gene expression
        profiles in response to toxic compds. and their use as kidney toxicity
        predictive genes)
     Transcription factors
TΤ
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (HNF-4 (hepatocyte nuclear factor 4); gene expression profiles in
        response to toxic compds. and their use as kidney toxicity predictive
        genes)
ΙT
     Glycoproteins
```

```
RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (HRG (histidine-rich glycoprotein); gene expression profiles in
        response to toxic compds. and their use as kidney toxicity predictive
        genes)
ΙT
     Transcription factors
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (ID1 (inhibitor of differentiation 1); gene expression profiles in
        response to toxic compds. and their use as kidney toxicity predictive
        genes)
ΙT
     Transcription factors
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (ID2 (inhibitor of differentiation 2); gene expression profiles in
        response to toxic compds. and their use as kidney toxicity predictive
        genes)
IT
     Proteins
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (IFRD1 (interferon-regulated developmental regulator 1); gene
        expression profiles in response to toxic compds. and their use as
        kidney toxicity predictive genes)
ΙT
     Insulin-like growth factor-binding proteins
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (IGFBP-1; gene expression profiles in response to toxic compds. and
        their use as kidney toxicity predictive genes)
ΙT
     Insulin-like growth factor-binding proteins
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (IGFBP-3; gene expression profiles in response to toxic compds. and
        their use as kidney toxicity predictive genes)
ΙT
     Protein formation factors
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (IRE-BP (iron-responsive element-binding protein); gene expression
        profiles in response to toxic compds. and their use as kidney toxicity
        predictive genes)
ΤТ
    Proteins
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (IgE-binding; gene expression profiles in response to toxic compds. and
        their use as kidney toxicity predictive genes)
TΤ
    RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (Jagged 1; gene expression profiles in response to toxic compds. and
        their use as kidney toxicity predictive genes)
ΤТ
    Proteins
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (L-FABP (liver fatty acid-binding protein); gene expression profiles in
        response to toxic compds. and their use as kidney toxicity predictive
        genes)
ΙT
    Ribosomal proteins
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (L13A; gene expression profiles in response to toxic compds. and their
```

```
use as kidney toxicity predictive genes)
ΙT
     Ribosomal proteins
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (L27; gene expression profiles in response to toxic compds. and their
        use as kidney toxicity predictive genes)
ΙT
     Ribosomal proteins
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (L6; gene expression profiles in response to toxic compds. and their
        use as kidney toxicity predictive genes)
IT
     Lipoprotein receptors
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (LDL; gene expression profiles in response to toxic compds. and their
        use as kidney toxicity predictive genes)
     Rat endogenous retrovirus
ΙT
        (LTR of; gene expression profiles in response to toxic compds. and
        their use as kidney toxicity predictive genes)
ΙT
     Cytokines
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (MBP (major basic protein), 1; gene expression profiles in response to
        toxic compds. and their use as kidney toxicity predictive genes)
ΙT
     P-glycoproteins
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (MDR1; gene expression profiles in response to toxic compds. and their
        use as kidney toxicity predictive genes)
TT
     P-glycoproteins
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (MDR2; gene expression profiles in response to toxic compds. and their
        use as kidney toxicity predictive genes)
IT
     P-glycoproteins
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (MDR3; gene expression profiles in response to toxic compds. and their
        use as kidney toxicity predictive genes)
IT
    Multidrug resistance proteins
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (MRP2; gene expression profiles in response to toxic compds. and their
        use as kidney toxicity predictive genes)
ΙT
     Proteins
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (Mx1; gene expression profiles in response to toxic compds. and their
        use as kidney toxicity predictive genes)
IT
     Cadherins
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (N-; gene expression profiles in response to toxic compds. and their
        use as kidney toxicity predictive genes)
IT
     Proteins
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (NGF-inducible anti-proliferative; gene expression profiles in response
        to toxic compds. and their use as kidney toxicity predictive genes)
```

```
ΙT
     Notch (receptor)
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (Notch1; gene expression profiles in response to toxic compds. and
        their use as kidney toxicity predictive genes)
IT
     Transport proteins
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (OCTN1 (organic cation transporter 1); gene expression profiles in
        response to toxic compds. and their use as kidney toxicity predictive
        genes)
TT
     Transport proteins
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (OCTN2 (organic cation transporter 2); gene expression profiles in
        response to toxic compds. and their use as kidney toxicity predictive
        genes)
IT
     Transport proteins
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (OCTN3 (organic cation transporter 3); gene expression profiles in
        response to toxic compds. and their use as kidney toxicity predictive
        genes)
ΤT
     Proteins
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (PAR-interacting; gene expression profiles in response to toxic compds.
        and their use as kidney toxicity predictive genes)
IT
     Proteins
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (PTEN/MMAC1; gene expression profiles in response to toxic compds. and
        their use as kidney toxicity predictive genes)
ΙT
     Proteins
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (RAD; gene expression profiles in response to toxic compds. and their
        use as kidney toxicity predictive genes)
ΙT
     Histocompatibility antigens
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (RT1 (rat, 1); gene expression profiles in response to toxic compds.
        and their use as kidney toxicity predictive genes)
IT
     Retinoid X receptors
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (RXRα; gene expression profiles in response to toxic compds. and
        their use as kidney toxicity predictive genes)
ΙT
     DNA microarray technology
     DNA microarray technology
     Gene expression profiles, animal
        (Rat 700 CT chip microarray; gene expression profiles in response to
        toxic compds. and their use as kidney toxicity predictive genes)
ΙT
    Proteins
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (Ref-1; gene expression profiles in response to toxic compds. and their
        use as kidney toxicity predictive genes)
    Ribosomal proteins
ΤТ
```

```
RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (S8; gene expression profiles in response to toxic compds. and their
        use as kidney toxicity predictive genes)
TΤ
     Ribosomal proteins
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (S9; gene expression profiles in response to toxic compds. and their
        use as kidney toxicity predictive genes)
ΙT
     Proteins
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (SCP2 (sterol carrier protein 2); gene expression profiles in response
        to toxic compds. and their use as kidney toxicity predictive genes)
ΙT
     Transport proteins
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (SGLT1 (sodium-dependent glucose transporter 1); gene expression
        profiles in response to toxic compds. and their use as kidney toxicity
       predictive genes)
ΙT
     Proteins
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (SOCS-3 (suppressor of cytokine signaling-3); gene expression profiles
        in response to toxic compds. and their use as kidney toxicity
        predictive genes)
ΙT
     Annexins
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (V; gene expression profiles in response to toxic compds. and their use
        as kidney toxicity predictive genes)
ΙT
     Cell adhesion molecules
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (VCAM-1; gene expression profiles in response to toxic compds. and
        their use as kidney toxicity predictive genes)
ΙT
    Anion channel
    RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (VDAC (voltage-dependent anion channel), VDAC2; gene expression
        profiles in response to toxic compds. and their use as kidney toxicity
       predictive genes)
TΤ
     Genetic element
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (VL30 element; gene expression profiles in response to toxic compds.
        and their use as kidney toxicity predictive genes)
    Transport proteins
ΙT
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (VMAT (vesicle monoamine transporter); gene expression profiles in
        response to toxic compds. and their use as kidney toxicity predictive
        genes)
    Proteins
TΤ
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (acute-phase, major \alpha1; gene expression profiles in response to
        toxic compds. and their use as kidney toxicity predictive genes)
```

IT

Proteins

発売

```
RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (apoptosis-regulating, basic; gene expression profiles in response to
        toxic compds. and their use as kidney toxicity predictive genes)
ΙT
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (aquaporin 3; gene expression profiles in response to toxic compds. and
        their use as kidney toxicity predictive genes)
     Transcription factors
IΤ
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (c-fos; gene expression profiles in response to toxic compds. and their
        use as kidney toxicity predictive genes)
ΙT
     Transcription factors
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (c-jun; gene expression profiles in response to toxic compds. and their
        use as kidney toxicity predictive genes)
ΙT
     Transcription factors
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (c-myc; gene expression profiles in response to toxic compds. and their
        use as kidney toxicity predictive genes)
ΙT
     Calcium-binding proteins
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (calgranulin A; gene expression profiles in response to toxic compds.
        and their use as kidney toxicity predictive genes)
ΙT
     Calcium-binding proteins
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (calgranulin B; gene expression profiles in response to toxic compds.
        and their use as kidney toxicity predictive genes)
IT
     Proteins
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (calpactin I; gene expression profiles in response to toxic compds. and
        their use as kidney toxicity predictive genes)
ΙT
     Information systems
        (computerized; gene expression profiles in response to toxic compds.
        and their use as kidney toxicity predictive genes)
IT
     Elongation factors (protein formation)
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (eEF-1\alpha; gene expression profiles in response to toxic compds.
        and their use as kidney toxicity predictive genes)
     Initiation factors (protein formation)
RL: BSU (Biological study, unclassified); BUU (Biological use,
IT
     unclassified); BIOL (Biological study); USES (Uses)
        (eIF-4E; gene expression profiles in response to toxic compds. and
        their use as kidney toxicity predictive genes)
ΙT
     Proteins
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (emerin; gene expression profiles in response to toxic compds. and
        their use as kidney toxicity predictive genes)
     Canis familiaris
ΤТ
     Human
```

```
Primates
     Rattus
     cDNA sequences
        (gene expression profiles in response to toxic compds. and their use as
        kidney toxicity predictive genes)
ΙT
     Albumins, biological studies
     Aromatic hydrocarbon receptors
     Calnexin
     Calreticulin
     Clusterin
     Cyclophilins
     Decorins
     Fibrinogens
     Interleukin 10
     Interleukin 18
     Interleukin 1ß
     Macrophage inflammatory protein 1\alpha
     Myelin basic protein
     Nerve growth factor receptors
     Osteopontin
     Proliferating cell nuclear antigen
     Thrombin receptors
     Thrombomodulin
     Transferrins
     Urokinase-type plasminogen activator receptors
     p53 (protein)
       α 1-Acid glycoprotein
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (gene expression profiles in response to toxic compds. and their use as
        kidney toxicity predictive genes)
TΤ
     Proteins
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (heme-binding, 23; gene expression profiles in response to toxic
        compds. and their use as kidney toxicity predictive genes)
ΙT
     Transport proteins
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (hydrogen ion-sodium exchanger; gene expression profiles in response to
        toxic compds. and their use as kidney toxicity predictive genes)
IT
     Dyneins
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (light chain 1; gene expression profiles in response to toxic compds.
        and their use as kidney toxicity predictive genes)
TΤ
     Proteins
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (natural killer cell-enhancing factor B; gene expression profiles in
        response to toxic compds. and their use as kidney toxicity predictive
        genes)
ΙT
     Toxicity
        (nephrotoxicity; gene expression profiles in response to toxic compds.
        and their use as kidney toxicity predictive genes)
ΙT
     Proteins
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (nucleic acid-binding, cellular; gene expression profiles in response
```

Constituted of the State of St

```
to toxic compds. and their use as kidney toxicity predictive genes)
IT
     Transport proteins
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (nucleoside transporter; gene expression profiles in response to toxic
        compds. and their use as kidney toxicity predictive genes)
ΙT
     Transport proteins
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (organic anion transporter, 3; gene expression profiles in response to
        toxic compds. and their use as kidney toxicity predictive genes)
IT
     Transport proteins
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (organic anion transporter, K1; gene expression profiles in response to
        toxic compds. and their use as kidney toxicity predictive genes)
ΙT
     Transport proteins
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (organic anion transporter, renal; gene expression profiles in response to
        toxic compds. and their use as kidney toxicity predictive genes)
ΙT
     Proteins
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (p125FAK; gene expression profiles in response to toxic compds. and
        their use as kidney toxicity predictive genes)
ΙT
    Ras proteins
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (p21c-Ha-ras; gene expression profiles in response to toxic compds. and
        their use as kidney toxicity predictive genes)
ΙT
    Enzymes, biological studies
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (peroxisomal multifunctional type II; gene expression profiles in
        response to toxic compds. and their use as kidney toxicity predictive
        genes)
IΤ
    Proteins
    RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (peroxisome assembly factor 2; gene expression profiles in response to
        toxic compds. and their use as kidney toxicity predictive genes)
IT
    RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (phosphatidylethanolamine-binding; gene expression profiles in response
        to toxic compds. and their use as kidney toxicity predictive genes)
IT
     Proteins
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (proteasome activator 28a; gene expression profiles in response
        to toxic compds. and their use as kidney toxicity predictive genes)
TT
    RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (retinol-binding; gene expression profiles in response to toxic compds.
        and their use as kidney toxicity predictive genes)
ΙT
     Proteins
     RL: BSU (Biological study, unclassified); BUU (Biological use,
```

```
unclassified); BIOL (Biological study); USES (Uses)
        (selenium-containing, P; gene expression profiles in response to toxic
        compds. and their use as kidney toxicity predictive genes)
IT
     Proteins
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (senescence marker protein-30; gene expression profiles in response to
        toxic compds. and their use as kidney toxicity predictive genes)
IT
     Transport proteins
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (serotonin transporter; gene expression profiles in response to toxic
        compds. and their use as kidney toxicity predictive genes)
ΙT
     Proteins
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (stathmin; gene expression profiles in response to toxic compds. and
        their use as kidney toxicity predictive genes)
ΙT
     Kidney
        (toxicity; gene expression profiles in response to toxic compds. and
        their use as kidney toxicity predictive genes)
ΙT
     Activin receptors
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (type II; gene expression profiles in response to toxic compds. and
        their use as kidney toxicity predictive genes)
     Enzymes, biological studies
ΙT
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (ubiquitin-conjugating; gene expression profiles in response
        to toxic compds. and their use as kidney toxicity predictive genes)
ΙT
     Lipopolysaccharides
     Polyoxyalkylenes, biological studies
     RL: ADV (Adverse effect, including toxicity); ARU (Analytical role,
     unclassified); ANST (Analytical study); BIOL (Biological study)
        (use in design of standard kidney toxicity profile; gene expression
        profiles in response to toxic compds. and their use as kidney toxicity
        predictive genes)
ΙT
     Proteins
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (vacuole membrane protein 1; gene expression profiles in response to
        toxic compds. and their use as kidney toxicity predictive genes)
IT
     Proteins
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (zinc finger-containing; gene expression profiles in response to toxic
        compds. and their use as kidney toxicity predictive genes)
     Caseins, biological studies
ΙT
     Tubulins
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (\alpha\mbox{-};\mbox{ gene expression profiles in response to toxic compds. and}
        their use as kidney toxicity predictive genes)
     Macrophage inflammatory protein 2
IT
     Peroxisome proliferator-activated receptors
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (a; gene expression profiles in response to toxic compds. and
```

A STATE OF THE PARTY OF THE PAR

```
their use as kidney toxicity predictive genes)
ΙT
     Microglobulins
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (\alpha 1-; gene expression profiles in response to toxic compds. and
        their use as kidney toxicity predictive genes)
ΙT
     Macroglobulins
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (\alpha 2-; gene expression profiles in response to toxic compds. and
        their use as kidney toxicity predictive genes)
IT
     Tubulins
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (\beta-; gene expression profiles in response to toxic compds. and
        their use as kidney toxicity predictive genes)
ΙT
     Fetuins
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (\beta; gene expression profiles in response to toxic compds. and
        their use as kidney toxicity predictive genes)
ΙT
     Integrins
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (\beta 1; gene expression profiles in response to toxic compds. and
        their use as kidney toxicity predictive genes)
ΙT
     Integrins
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (\beta 4; gene expression profiles in response to toxic compds. and
        their use as kidney toxicity predictive genes)
ΙΤ
     Actins
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (\gamma-; gene expression profiles in response to toxic compds. and
        their use as kidney toxicity predictive genes)
ΙT
     Cholinergic receptors
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (&; gene expression profiles in response to toxic compds. and
        their use as kidney toxicity predictive genes)
ΙT
     9068-26-2, Protein mannosyltransferase
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (1; gene expression profiles in response to toxic compds. and their use
     as kidney toxicity predictive genes) 9029-97-4, 3-Ketoacyl-CoA thiolase
ΙΤ
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (2; gene expression profiles in response to toxic compds. and their use
        as kidney toxicity predictive genes)
IT
     60267-61-0, Ubiquitin
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (D; gene expression profiles in response to toxic compds. and their use
        as kidney toxicity predictive genes)
IT
     9001-03-0, Carbonic anhydrase
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
```

```
(III; gene expression profiles in response to toxic compds. and their
       use as kidney toxicity predictive genes)
ΙT
     9023-09-0, Sulfotransferase
    RL: BSU (Biological study, unclassified); BUU (Biological use,
    unclassified); BIOL (Biological study); USES (Uses)
        (K2; gene expression profiles in response to toxic compds. and their
       use as kidney toxicity predictive genes)
ΙT
    9054-89-1, Superoxide dismutase
    RL: BSU (Biological study, unclassified); BUU (Biological use,
    unclassified); BIOL (Biological study); USES (Uses)
        (copper-zinc containing; gene expression profiles in response to toxic
        compds. and their use as kidney toxicity predictive genes)
ΙT
    9000-83-3, ATPase
    RL: BSU (Biological study, unclassified); BUU (Biological use,
    unclassified); BIOL (Biological study); USES (Uses)
        (ecto-; gene expression profiles in response to toxic compds. and their
       use as kidney toxicity predictive genes)
ΙT
    9000-86-6, Alanine aminotransferase
                                          9001-12-1, Matrix metalloproteinase
        9001-40-5, Glucose-6-phosphate dehydrogenase 9001-50-7,
    Glyceraldehyde-3-phosphate dehydrogenase 9001-59-6, Pyruvate kinase
    9001-64-3, Malate dehydrogenase
                                     9001-66-5, Monoamine oxidase
                                         9004-06-2, Macrophage metalloelastase
    9001-83-6, Phosphoglycerate kinase
    9016-12-0, Hypoxanthine-guanine phosphoribosyltransferase
                                                                9023-58-9,
    Argininosuccinate synthetase
                                  9024-60-6, Ornithine decarboxylase
                                      9026-23-7, Carbamyl phosphate synthase
    9026-00-0, Cholesterol esterase
                                         9028-35-7, Hydroxymethylglutaryl-CoA
    9027-34-3, Argininosuccinate lyase
                9028-39-1, 3-Hydroxyisobutyrate dehydrogenase
                                                                9028-48-2,
                                   9028-86-8, Aldehyde dehydrogenase
    NADP isocitrate dehydrogenase
                                       9030-08-4, UDP-glucuronosyltransferase
    9029-33-8, Adrenodoxin reductase
                9031-37-2, Ceruloplasmin
                                           9031-61-2, Thymidylate synthase
    9030-42-6
    9031-72-5, Alcohol dehydrogenase 9031-86-1, Aspartoacylase 9033-53-8,
    Retinol dehydrogenase 9035-58-9, Blood-coagulation factor III
    9037-21-2, Tryptophan hydroxylase 9037-53-0, Cholesterol
    7α-hydroxylase
                    9039-06-9 9044-85-3, 3β-Hydroxysteroid
                    9046-27-9, \gamma-Glutamyl transpeptidase
    dehydrogenase
                                                           9055-67-8,
    Poly(ADP-ribose) polymerase 9059-22-7, Heme oxygenase
                                                              9077-69-4,
                                         9079-10-1, N-Hydroxy-2-
    Inositol polyphosphate multikinase
                                           9081-36-1, 25-Hydroxyvitamin D3
    acetylaminofluorene sulfotransferase
                     37228-72-1, Glycine methyltransferase
                                                             39391-18-9,
    lα-hydroxylase
    Prostaglandin H synthase
                               56093-23-3, \alpha1,2-Fucosyltransferase
    59088-22-1, 3-Methyladenine DNA glycosylase
                                                 60616-82-2, Cathepsin L
    61116-22-1, Fatty acyl-coa oxidase 62229-50-9, Epidermal growth factor
    67339-09-7, Thiopurine methyltransferase
                                               69403-06-1, Very-long-chain
                                                    74506-38-0, Medium-chain
                          71965-46-3, Cathepsin S
    acyl-CoA synthetase
    acyl-CoA dehydrogenase 77106-95-7, Carbonyl reductase
                                                              80295-41-6,
                                                                81627-83-0,
                   80497-65-0, Muellerian-inhibiting hormone
    Complement C3
                                  87397-91-9, Thymosin \beta10
                                                             91448-99-6,
    Colony-stimulating factor 1
    Cystatin c 123644-75-7, Dimethylarginine dimethylaminohydrolase
    127464-60-2, Vascular endothelial growth factor 140208-24-8, TIMP-1
                                             143180-75-0, DNA topoisomerase I
    141349-86-2, Cyclin-dependent kinase 2
    144114-16-9, Focal adhesion kinase
                                         147014-97-9, Cyclin-dependent kinase
        148348-15-6, Fibroblast growth factor 7
                                                  156681-44-6,
    α-Methylacyl-CoA racemase
                                165245-96-5, Protein kinase p38mapk
    182372-14-1, Caspase 2
                             184111-06-6, D-Dopachrome tautomerase
    189258-14-8, Caspase 7
                             206138-18-3, Proteinase inhibitor, PSTI-II
    329743-16-0, Protein tyrosine phosphatase \alpha
                                                  329764-85-4,
                           329900-75-6, Cyclooxygenase 2
                                                           330207-10-8,
    Cytochrome p 450 1A1
    Cytochrome P 450 2B1
                            330596-22-0, Cytochrome p 450 1B1
                                                               331462-97-6,
    Cytochrome P 450 2B2
                           331823-00-8, Cytochrome P 450 2C11
```

```
Cytochrome p 450 2A3
                             440356-80-9, Cytochrome P 450 14DM
                                                                   455255-58-0,
     Cytochrome P 450 2c23
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (gene expression profiles in response to toxic compds. and their use as
        kidney toxicity predictive genes)
IT
     134498-15-0
                   138362-96-6
                                  139821-48-0
                                                 139821-65-1, DNA (Rattus
     norvegicus \alpha-casein cDNA)
                                  139821-71-9
                                                 139821-87-7
                                                               139822-39-2
     139823-22-6
                   139823-24-8
                                  139823-59-9
                                                139823-80-6
                                                               139824-84-3
     139825-73-3, DNA (Rattus norvegicus gene Maobf3)
                                                          139837-88-0, DNA
     (Rattus norvegicus gene COXII)
                                       139849-13-1
                                                      139863-54-0
                                                                    140044-24-2
                                                140045-26-7
                   140044-54-8
                                  140044-95-7
     140044-41-3
                                                               140045-41-6
     140045-44-9
                   140045-74-5
                                  140045-93-8
                                                 140046-07-7
                                                               140046-14-6
     140046-33-9
                   140046-53-3
                                  140046-68-0
                                                140046-72-6
                                                               140047-02-5
     140047-20-7
                   140047-44-5
                                  140047-60-5
                                                140048-01-7
                                                               140048-23-3
                   140048-66-4
                                                140065-72-1
     140048-60-8
                                  140048-97-1
                                                               140065-90-3
                   140072-96-4
                                  140098-21-1
                                                140297-85-4
                                                               140297-86-5
     140072-23-7
                   140298-35-7
                                  140298-84-6
                                                 140298-97-1
                                                               140299-51-0
     140298-16-4
     140302-71-2
                   140303-13-5
                                  140326-74-5
                                                140326-92-7
                                                               140326-94-9
     140332-13-4, DNA (Rattus norvegicus \beta-actin gene)
                                                           140334-56-1
                   140507-74-0, GenBank M11972
                                                   140534-69-6
     140357-69-3
                                                                 140536-52-3
     140537-48-0
                   140767-92-6
                                  140770-54-3
                                                 140771-04-6
                                                               140801-58-7
     140816-09-7
                   140825-52-1
                                  140970-73-6
                                                 141003-49-8
                                                               141877-88-5
                   142863-54-5
                                  143369-37-3
                                                143387-81-9, DNA (rat clone 4B
     142863-49-8
     osteopontin cDNA plus flanks)
                                      143910-48-9
                                                     144623-69-8
                                                                   144623-90-5
                   145677-41-4
                                  145971-52-4, DNA (rat argininosuccinate lyase
     145496-01-1
                         145974-03-4
                                        147037-57-8, DNA (rat clone pRMIS2
     cDNA plus flanks)
     muellerian-inhibiting hormone gene plus flanks)
                                                         147053-09-6
     148167-97-9
                   148168-17-6
                                  148282-69-3, DNA (Rattus norvegicus gene cdk4)
     148282-77-3
                   148391-72-4
                                  148804-85-7
                                                149480-30-8
                                                               149567-00-0
     150001-33-5, DNA (rat T-lymphocyte calnexin cDNA)
                                                           150278-01-6
     150278-04-9
                   150488-32-7
                                  150886-54-7, DNA (rat NRK-49F cell cyclin G
                         150914-11-7
                                        151319-15-2
                                                       151429-46-8
                                                                     151549-22-3
     cDNA plus flanks)
     151577-58-1
                   151579-60-1
                                  151579-61-2
                                                152281-18-0
                                                               152283-44-8
     152283-45-9
                   153663-88-8
                                  153962-38-0
                                                154211-54-8
                                                               154298-83-6
     154331-92-7
                   155120-31-3
                                  156255-88-8
                                                156828-65-8
                                                               157317-28-7
     157934-99-1
                   160044-91-7
                                  160102-07-8, DNA (Rattus norvegicus gene rad)
                   162159-01-5
                                  162455-43-8
                                                163369-53-7
                                                               165148-61-8
     160897-42-7
     165221-30-7
                   165764-61-4
                                  168310-93-8
                                                169076-82-8
                                                               169732-79-0
                   170334-61-9
                                  170592-32-2
                                                171166-11-3
                                                               171796-21-7
     170176-45-1
     172712-78-6
                   174054-37-6
                                  174448-58-9
                                                175006-50-5
                                                               175034-32-9
     178296-42-9
                   178299-05-3
                                  178353-56-5
                                                179492-11-6
                                                               179794-70-8
     179973-64-9
                   180173-21-1
                                  180568-28-9
                                                180882-95-5
                                                               182739-61-3
     185090-50-0
                   185835-25-0
                                  187859-80-9
                                                194381-51-6
                                                               194383-50-1
     196024-31-4
                   197736-87-1
                                  197829-62-2
                                                199432-03-6
                                                               200024-91-5
     200334-54-9
                   202112-71-8
                                  202490-99-1
                                                204282-09-7
                                                               204418-90-6
     204418-91-7
                   205299-55-4
                                  206913-90-8
                                                206969-37-1
                                                               207032-85-7
                                                209827-11-2
                                                               209842-67-1
     207772-19-8
                   207941-92-2
                                  208812-95-7
                  DNA (Rattus norvegicus caspase-7 cDNA)
                                                             210001-46-0
     209876-77-7,
                                                                      210456-72-7
     210385-71-0
                   210450-29-6, DNA (Rattus norvegicus gene mrp3)
                                                212216-37-0
     210498-08-1
                   211062-64-5
                                  211222-98-9
                                                               212664-15-8
                   215396-62-6
                                  218350-51-7
                                                222770-32-3
                                                               225434-22-0
     212719-89-6
                                  225694-96-2
     225543-56-6
                   225602-44-8
                                                243111-96-8
                                                               243112-03-0
                   285544-89-0
                                                301143-99-7
                                                               325611-43-6, DNA
     252774-19-9
                                  299156-44-8
                                                     382726-30-9
                                                                   382731-00-2
     (Rattus norvegicus gene Ipmk)
                                      358274-35-8
     382732-07-2
                   382736-82-5
                                  384433-79-8
                                                 384493-50-9
                                                               384501-39-7
                                                391573-09-4
                                                               391814-51-0
     384613-15-4
                   384725-40-0
                                  384731-87-7
                                  392193-75-8
                                                 398113-42-3
                                                               630426-94-7
     392025-09-1
                   392029-40-2
                                  630426-97-0
                                                 630426-98-1
                                                               630426-99-2
     630426-95-8
                   630426-96-9
```

```
630427-00-8
                    630427-01-9
                                   630427-02-0
                                                 630427-03-1
                                                                630427-04-2
     630427-05-3
                    630427-06-4
                                   630427-07-5
                                                 630427-08-6
                                                                630427-09-7
     630427-10-0
                    630427-11-1
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); PRP (Properties); BIOL (Biological study); USES (Uses)
        (nucleotide sequence; gene expression profiles in response to toxic
        compds. and their use as kidney toxicity predictive genes)
IT
     630427-12-2
                    630427-13-3
                                   630427-14-4
                                                 630427-15-5
                                                                630427-16-6
     630427-17-7
                    630427-18-8
                                   630427-19-9
                                                 630427-20-2
                                                                630427-21-3
                                                                630427-26-8
     630427-22-4
                    630427-23-5
                                   630427-24-6
                                                 630427-25-7
     630427-28-0
                    630427-29-1
                                   630427-30-4
                                                 630427-31-5
                                                                630427-32-6
                                                 630427-36-0
     630427-33-7
                    630427-34-8
                                   630427-35-9
                                                                630427-37-1
     630427-38-2
                    630427-39-3
                                   630427-40-6
                                                 630427-41-7
                                                                630427-42-8
     630427-43-9
                    630427-44-0
                                   630427-45-1
                                                 630427-46-2
                                                                630427-47-3
     630427-48-4
                    630427-49-5
                                   630427-50-8
                                                 630427-51-9
                                                                630427-52-0
     630427-53-1
                    630427-54-2
                                                 630427-56-4
                                                                630427-57-5
                                   630427-55-3
     630427-58-6
                    630427-59-7
                                   630427-60-0
                                                 630427-61-1
                                                                630427-62-2
                    630427-64-4
                                   630427-65-5
                                                 630427-66-6
                                                                630427-67-7
     630427-63-3
     630427-68-8
                    630427-69-9
                                   630427-70-2
                                                 630427-71-3
                                                                630427-72-4
     630427-73-5
                    630427-74-6
                                   630427-75-7
                                                 630427-76-8
                                                                630427-77-9
     630427-78-0
                    630427-79-1
                                   630427-80-4
                                                 630427-81-5
                                                                630427-82-6
     630427-83-7
                    630427-84-8
                                   630427-85-9
                                                 630427-86-0
                                                                630427-87-1
     630427-88-2
                    630427-89-3
                                   630427-90-6
                                                 630427-91-7
                                                                630427-92-8
     630427-93-9
                    630427-94-0
                                   630427-95-1
                                                 630427-96-2
                                                                630427-97-3
     630427-98-4
                    630427-99-5
                                   630428-00-1
                                                 630428-01-2
                                                                630428-02-3
                                                                630428-07-8
     630428-03-4
                    630428-04-5
                                   630428-05-6
                                                 630428-06-7
                                   630428-10-3
                                                                630428-12-5
     630428-08-9
                    630428-09-0
                                                 630428-11-4
                    630428-14-7
                                                 630428-16-9
     630428-13-6
                                   630428-15-8
                                                                630428-17-0
     630428-18-1
                    630428-19-2
                                   630428-20-5
                                                 630428-21-6
                                                                630428-22-7
     630428-23-8
                    630428-24-9
                                   630428-25-0
                                                 630428-26-1
                                                                630428-27-2
                    630428-29-4
                                   630428-30-7
                                                 630428-31-8
                                                                630428-32-9
     630428-28-3
     630428-33-0
                    630428-34-1
                                   630428-35-2
                                                 630428-36-3
                                                                630428-37-4
     630428-38-5
                    630428-39-6
                                   630428-40-9
                                                 630428-41-0
                                                                630428-42-1
     630428-43-2
                    630428-44-3
                                   630428-45-4
                                                 630428-46-5
                                                                630428-47-6
     630428-48-7
                    630428-49-8
                                   630428-50-1
                                                 630428-51-2
                                                                630428-52-3
     630428-53-4
                    630428-54-5
                                   630428-55-6
                                                 630428-56-7
                                                                630428-57-8
     630428-58-9
                    630428-59-0
                                   630428-60-3
                                                 630428-61-4
                                                                630428-62-5
     630428-63-6
                    630428-64-7
                                  630428-65-8
                                                 630428-66-9
                                                                630428-67-0
     630428-68-1
                    630428-69-2
                                  630428-70-5
                                                 630428-71-6
                                                                630428-72-7
     630428-73-8
                    630428-74-9
                                  630428-75-0
                                                 630428-76-1
                                                                630428-77-2
     630428-78-3
                    630428-79-4
                                  630428-80-7
                                                 630428-81-8
                                                                630428-82-9
     630428-83-0
                    630428-84-1
                                  630428-85-2
                                                 630428-86-3
                                                                630428-87-4
                                                                630428-92-1
     630428-88-5
                    630428-89-6
                                  630428-90-9
                                                 630428-91-0
                                                 631923-17-6
                                                                631923-18-7
     630428-93-2
                    631923-13-2
                                  631923-16-5
     631923-19-8
                    631923-20-1
                                  631923-21-2
                                                 631923-22-3
                                                                631923-23-4
                                  631923-26-7
     631923-24-5
                    631923-25-6
                                                 631923-27-8
                                                                631923-28-9
                                                                631923-33-6
                    631923-30-3
                                                 631923-32-5
     631923-29-0
                                  631923-31-4
                                                                631923-38-1
                    631923-35-8
                                  631923-36-9
                                                 631923-37-0
     631923-34-7
                                                                631923-43-8
                                                 631923-42-7
     631923-39-2
                    631923-40-5
                                  631923-41-6
                                                 631923-47-2
                                                                631923-48-3
     631923-44-9
                    631923-45-0
                                  631923-46-1
                                                                631923-53-0
     631923-49-4
                    631923-50-7
                                  631923-51-8
                                                 631923-52-9
                                                                631923-58-5
                    631923-55-2
                                  631923-56-3
                                                 631923-57-4
     631923-54-1
                                                                631923-63-2
     631923-59-6
                    631923-60-9
                                  631923-61-0
                                                 631923-62-1
     631923-64-3
                                                 631923-67-6
                                                                631923-68-7
                    631923-65-4
                                  631923-66-5
     631923-69-8
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); PRP (Properties); BIOL (Biological study); USES (Uses)
        (nucleotide sequence; gene expression profiles in response to toxic
```

compds. and their use as kidney toxicity predictive genes)

```
ΙT
     631923-70-1
                   631923-71-2
                                 631923-72-3
                                               631923-73-4
                                                             631923-74-5
                   631923-76-7
     631923-75-6
                                 631923-77-8
                                               631923-78-9
                                                            631923-79-0
     631923-80-3
                   631923-81-4
                                 631923-82-5
                                               631923-83-6
                                                             631923-84-7
     631923-85-8
                   631923-86-9
                                 631923-87-0
                                               631923-88-1
                                                             631923-89-2
     631923-90-5
                   631923-91-6
                                 631923-92-7
                                               631923-93-8
                                                             631923-94-9
     631923-95-0
                   631923-96-1
                                 631923-97-2
                                               631923-98-3
                                                             631923-99-4
     631924-00-0
                   631924-01-1
                                 631924-02-2
                                               631924-03-3
                                                             631924-04-4
     631924-05-5
                  631924-06-6
                                 631924-07-7
                                               631924-08-8
                                                             631924-09-9
     631924-10-2
                  631924-11-3
                                631924-12-4
                                              631924-13-5
                                                            631924-14-6
     631924-15-7
                  631924-16-8
                                631924-17-9
                                              631924-18-0
                                                            631924-19-1
     631924-20-4
                  631924-21-5
                                631924-22-6
                                              631924-23-7
                                                            631924-24-8
     631924-25-9
                  631924-26-0
                                631924-27-1
                                              631924-28-2
                                                            631924-29-3
                  631924-31-7
     631924-30-6
                                631924-32-8
                                              631924-33-9
                                                            631924-34-0
     631924-35-1
                  631924-36-2
                                631924-37-3
                                              631924-38-4
                                                            631924-39-5
     631924-40-8
                   631924-41-9
                                631924-42-0
                                              631924-43-1
                                                            631924-44-2
                   631924-46-4
     631924-45-3
                                631924-47-5
                                              631924-48-6
                                                            631924-49-7
     631924-50-0
                  631924-51-1
                                631924-52-2
                                              631924-53-3
                                                            631924-54-4
     631924-55-5
                  631924-56-6
                                631924-57-7
                                              631924-58-8
                                                            631924-59-9
     631924-60-2
                  631924-61-3
                                631924-62-4
                                              631924-63-5
                                                            631924-64-6
     631924-65-7
                  631924-66-8
                                631924-67-9
                                              631924-68-0
                                                            631924-69-1
                                631924-72-6
                                              631924-73-7
     631924-70-4
                  631924-71-5
                                                            631924-74-8
                 631924-76-0
                                631924-77-1
                                                            631924-79-3
     631924-75-9
                                              631924-78-2
     631924-80-6 631924-81-7
                                631924-82-8
                                              631924-83-9
                                                            631924-84-0
     631924-85-1
                  631924-86-2
                                631924-87-3
                                              631924-88-4
                                                            631924-89-5
     631924-90-8 631924-91-9
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); PRP (Properties); BIOL (Biological study); USES (Uses)
        (nucleotide sequence; gene expression profiles in response to toxic
        compds. and their use as kidney toxicity predictive genes)
ΙT
     361540-77-4
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (subunit B; gene expression profiles in response to toxic compds. and
        their use as kidney toxicity predictive genes)
ΙT
     9001-16-5, Cytochrome oxidase
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (subunits II and IV; gene expression profiles in response to toxic
        compds. and their use as kidney toxicity predictive genes)
ΙT
     50-02-2, Dexamethasone 50-06-6, Phenobarbital, biological
               50-18-0, Cyclophosphamide
                                         50-28-2, Estradiol, biological
     studies
               50-32-8, Benzo[a]pyrene, biological studies
                                                           50-53-3,
     studies
     Chlorpromazine, biological studies 51-21-8, 5-Fluorouracil
                                                                   53-79-2,
                54-85-3, Isoniazid 55-98-1, Busulfan
     Puromycin
                                                        56-23-5, Carbon
     tetrachloride, biological studies 56-54-2, Quinidine
                                                            58-55-9,
     Theophylline, biological studies 59-05-2, Methotrexate
                                                               60 - 54 - 8,
                   62-75-9, Dimethylnitrosamine 66-81-9, Cycloheximide
     Tetracycline
     67-66-3, Chloroform, biological studies 71-43-2, Benzene, biological
              100-63-0, Phenylhydrazine 103-90-2, Acetaminophen
                                                                    108-86-1,
     Bromobenzene, biological studies 127-07-1, Hydroxyurea
                                                              154-93-8,
                 446-86-6, Azathioprine 465-65-6, Naloxone
                                                               551-06-4,
     Carmustine
     1-Naphthylisothiocyanate 637-07-0, Clofibrate 1397-89-3, Amphotericin
         1403-66-3, Gentamicin
                               3521-62-8, Erythromycin estolate
                                                                   5786-21-0,
     Clozapine
                 9004-32-4, Carboxymethyl cellulose sodium salt
                                                                10108-64-2,
                       10540-29-1, Tamoxifen
     Cadmium chloride
                                              15663-27-1, Cisplatin
                                22494-42-4, Diflunisal 23214-92-8,
     18883-66-4, Streptozotocin
                  25322-68-3, Polyethylene glycol
                                                    59865-13-3, Cyclosporin A
     Doxorubicin
     65277-42-1, Ketoconazole 82410-32-0, Gancyclovir
     RL: ADV (Adverse effect, including toxicity); ARU (Analytical role,
```

unclassified); ANST (Analytical study); BIOL (Biological study) (use in design of standard kidney toxicity profile; gene expression profiles in response to toxic compds. and their use as kidney toxicity predictive genes)

IT 60382-71-0, Diacylglycerol kinase

RL: BSU (Biological study, unclassified); BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

( $\zeta$ ; gene expression profiles in response to toxic compds. and their use as kidney toxicity predictive genes)

IT 9034-51-9, Hemoglobin A

RL: BSU (Biological study, unclassified); BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

( $\alpha$ 1-chain; gene expression profiles in response to toxic compds.

and their use as kidney toxicity predictive genes)

IT 50-02-2, Dexamethasone

RL: ADV (Adverse effect, including toxicity); ARU (Analytical role, unclassified); ANST (Analytical study); BIOL (Biological study) (use in design of standard kidney toxicity profile; gene expression profiles in response to toxic compds. and their use as kidney toxicity predictive genes)

RN 50-02-2 HCAPLUS

CN Pregna-1,4-diene-3,20-dione, 9-fluoro-11,17,21-trihydroxy-16-methyl-,  $(11\beta,16\alpha)$ - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

- L46 ANSWER 11 OF 65 HCAPLUS COPYRIGHT 2004 ACS on STN
- AN 2003:892567 HCAPLUS
- DN 139:386334
- ED Entered STN: 14 Nov 2003
- TI Production of monomeric calicheamicin derivative cytotoxic drug/carrier conjugates
- IN Kunz, Arthur; Moran, Justin Keith; Rubino, Joseph Thomas; Jain, Neera; Vidunas, Eugene Joseph; Simpson, John McLean; Robbins, Paul David; Merchant, Nishith; Dijoseph, John Francis; Ruppen, Mark Edward; Damle, Nitin Krishnaji; Popplewell, Andrew George; et al.
- PA Wyeth Holdings Corporation, USA
- SO PCT Int. Appl., 186 pp.
- CODEN: PIXXD2
- DT Patent
- LA English
- IC ICM A61K
- CC 63-5 (Pharmaceuticals)

Section cross-reference(s): 15

FAN.CNT 2

```
KIND DATE APPLICATION NO. DATE
      PATENT NO.
                                                                                 _____
      WO 2003092623 A2 20031113 WO 2003-US13910 20030502 WO 2003092623 A3 20040318
PΙ
          2003092623

A3 20040318

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
                                      20020502
PRAI US 2002-377440P
                              Ρ
CLASS
 PATENT NO. CLASS PATENT FAMILY CLASSIFICATION CODES
 WO 2003092623 ICM A61K
     The present invention relates to methods for. the production of monomeric
      cytotoxic drug/carrier conjugates (the "conjugates")
      with higher drug loading and substantially reduced low conjugate
      fraction (LCF). Cytotoxic drug derivative/antibody conjugates,
      compns. comprising the conjugates and uses of the
      conjugates are also described. Particularly, the invention
      relates to anti-CD22 antibody-monomeric calicheamicin conjugates
         The invention also relates to the conjugates of the
      invention, to methods of purification of the conjugates, to
      pharmaceutical compns. comprising the conjugates, and to uses of
      the conjugates.
      calicheamicin deriv antibody cytotoxic drug carrier conjugate
ST
ΙT
     Carbohydrates, uses
      RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
          (Aldaric aci; production of monomeric calicheamicin derivative cytotoxic
         drug/carrier conjugates)
ΙT
      CD antigens
      RL: BSU (Biological study, unclassified); BIOL (Biological study)
          (CD33, antibody specific for; production of monomeric calicheamicin
derivative
         cytotoxic drug/carrier conjugates)
IT
      Liquid chromatography
         (FPLC, SEC (size exclusion chromotog.); production of monomeric
         calicheamicin derivative cytotoxic drug/carrier conjugates)
ΙT
      Hydrophobic interaction chromatography
         (Macro-Prep Me, Macro-Prep t-Bu; production of monomeric calicheamicin
         derivative cytotoxic drug/carrier conjugates)
      Carbohydrates, uses
IT
      RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
          (aldonic acids; production of monomeric calicheamicin derivative cytotoxic
         drug/carrier conjugates)
IT
      Carbohydrates, uses
      RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
          (aldoses; production of monomeric calicheamicin derivative cytotoxic
         drug/carrier conjugates)
IT
      Carbohydrates, uses
      RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
          (amino sugars; production of monomeric calicheamicin derivative cytotoxic
         drug/carrier conjugates)
IT
      Hormones, animal, biological studies
```

(humanized; production of monomeric calicheamicin derivative cytotoxic drug/carrier conjugates) ΙT Drug delivery systems (injections, i.p.; production of monomeric calicheamicin derivative cytotoxic drug/carrier conjugates) Drug delivery systems (injections, i.v.; production of monomeric calicheamicin derivative cytotoxic drug/carrier conjugates) IT Drug delivery systems (injections, intraarterial; production of monomeric calicheamicin derivative cytotoxic drug/carrier conjugates) ΙT Drug delivery systems (injections, intramedullar; production of monomeric calicheamicin derivative cytotoxic drug/carrier conjugates) ΙT Drug delivery systems (injections, intrathecal; production of monomeric calicheamicin derivative cytotoxic drug/carrier conjugates) ΙT Drug delivery systems (injections, s.c.; production of monomeric calicheamicin derivative cytotoxic drug/carrier conjugates) Drug delivery systems (injections, transcutaneous; production of monomeric calicheamicin derivative cytotoxic drug/carrier conjugates) IT Drug delivery systems (injections, transdermal; production of monomeric calicheamicin derivative cytotoxic drug/carrier conjugates) ΙT Monosaccharides RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses) (ketoses; production of monomeric calicheamicin derivative cytotoxic drug/carrier conjugates) IT Antibodies and Immunoglobulins RL: BUU (Biological use, unclassified); PRP (Properties); BIOL (Biological study); USES (Uses) (light chain, variable region; production of monomeric calicheamicin derivative cytotoxic drug/carrier conjugates) B cell (lymphocyte) TΤ (malignancy; production of monomeric calicheamicin derivative cytotoxic drug/carrier conjugates) ITAntibodies and Immunoglobulins RL: ARG (Analytical reagent use); BUU (Biological use, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses) (monoclonal; production of monomeric calicheamicin derivative cytotoxic drug/carrier conjugates) Cytotoxic agents IT(monomeric; production of monomeric calicheamicin derivative cytotoxic drug/carrier conjugates) ITDrug delivery systems (nasal; production of monomeric calicheamicin derivative cytotoxic drug/carrier conjugates) IT Lymphoma (non-Hodgkin's, treatment of; production of monomeric calicheamicin derivative cytotoxic drug/carrier conjugates)

```
IT
     Tubulins
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (polymerization, inhibitor of; production of monomeric calicheamicin
derivative
        cytotoxic drug/carrier conjugates)
     Alkylating agents, biological
IT
     Antitumor agents
     Cryoprotectants
     HPLC
     Human
    Linking agents
    Mus
     Protein sequences
     Surfactants
        (production of monomeric calicheamicin derivative cytotoxic drug/carrier
        conjugates)
IΤ
    Alditols
     Lactones
     Polyoxyalkylenes, uses
     Uronic acids
     RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
        (production of monomeric calicheamicin derivative cytotoxic drug/carrier
        conjugates)
    Antibodies and Immunoglobulins
IT
     RL: ARG (Analytical reagent use); BUU (Biological use, unclassified); ANST
     (Analytical study); BIOL (Biological study); USES (Uses)
        (production of monomeric calicheamicin derivative cytotoxic drug/carrier
        conjugates)
IT
     Growth factors, animal
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
        (production of monomeric calicheamicin derivative cytotoxic drug/carrier
        conjugates)
IT
     Antibodies and Immunoglobulins
     RL: BUU (Biological use, unclassified); PRP (Properties); BIOL (Biological
     study); USES (Uses)
        (production of monomeric calicheamicin derivative cytotoxic drug/carrier
        conjugates)
IT
     Androgens
     RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (production of monomeric calicheamicin derivative cytotoxic drug/carrier
        conjugates)
ΙT
    Corticosteroids, biological studies
     RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (production of monomeric calicheamicin derivative cytotoxic drug/carrier
        conjugates)
TΨ
     Cytokines
     RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (production of monomeric calicheamicin derivative cytotoxic drug/carrier
        conjugates)
IT
     Estrogens
     RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (production of monomeric calicheamicin derivative cytotoxic drug/carrier
        conjugates)
```

ΙT

Interferons

```
RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (production of monomeric calicheamicin derivative cytotoxic drug/carrier
        conjugates)
ΙT
     Interleukin 2
     RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (production of monomeric calicheamicin derivative cytotoxic drug/carrier
        conjugates)
IT
     Interleukins
     RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (production of monomeric calicheamicin derivative cytotoxic drug/carrier
        conjugates)
ΙT
     Progestogens
     RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (production of monomeric calicheamicin derivative cytotoxic drug/carrier
        conjugates)
     Steroids, biological studies
ΤТ
     RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (production of monomeric calicheamicin derivative cytotoxic drug/carrier
        conjugates)
ΙT
     Taxanes
     RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (production of monomeric calicheamicin derivative cytotoxic drug/carrier
        conjugates)
     Tumor necrosis factors
IT
     RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (production of monomeric calicheamicin derivative cytotoxic drug/carrier
        conjugates)
IT
     Drug delivery systems
        (rectal; production of monomeric calicheamicin derivative cytotoxic
        drug/carrier conjugates)
     Antibodies and Immunoglobulins
ΙΤ
     RL: ARG (Analytical reagent use); BUU (Biological use, unclassified); ANST
     (Analytical study); BIOL (Biological study); USES (Uses)
        (single chain; production of monomeric calicheamicin derivative cytotoxic
        drug/carrier conjugates)
ΙT
     Drug delivery systems
        (sublingual; production of monomeric calicheamicin derivative cytotoxic
        drug/carrier conjugates)
ΙT
     Drug delivery systems
        (topical; production of monomeric calicheamicin derivative cytotoxic
        drug/carrier conjugates)
IT
     Carcinoma
     Leukemia
     Neoplasm
     Sarcoma
        (treatment of; production of monomeric calicheamicin derivative cytotoxic
        drug/carrier conjugates)
ΙT
     Polymerization
        (tubulin, inhibitor of; production of monomeric calicheamicin derivative
        cytotoxic drug/carrier conjugates)
IT
     Drug delivery systems
        (vaginal; production of monomeric calicheamicin derivative cytotoxic
```

```
drug/carrier conjugates)
     207464-48-0, Toyopearl Ether
IT
     RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
         (-650M, chromatog. medium; production of monomeric calicheamicin derivative
         cytotoxic drug/carrier conjugates)
     9005-25-8D, Starch, hydroxyethyl derivs.
ΙT
     RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
         (40; production of monomeric calicheamicin derivative cytotoxic drug/carrier
        conjugates)
IT
     9012-36-6D, Sepharose, derivs.
     RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
         (Fast Flow chromatog. medium; production of monomeric calicheamicin
derivative
        cytotoxic drug/carrier conjugates)
ΙT
     335197-32-5P
                     369632-97-3P
                                      369632-98-4P
                                                      623141-79-7P
                                                                       623141-80-0P
     623141-81-1P
                      623141-82-2P
                                      623141-83-3P
                                                      623141-84-4P
                                                                       623954-95-0P
                                    623954-98-3P
     623954-96-1P
                     623954-97-2P
                                                      623954-99-4P
                                                                       623955-00-0P
     RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
     PRP (Properties); BIOL (Biological study); PREP (Preparation)
         (amino acid sequence; production of monomeric calicheamicin derivative
        cytotoxic drug/carrier conjugates)
ΙT
     124-07-2, Octanoic acid, biological studies
                                                       334-48-5, Decanoic acid
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
         (as additive; production of monomeric calicheamicin derivative cytotoxic
        drug/carrier conjugates)
     65623-82-7, 4-(4- Acetylphenoxy) butanoic acid
ΙT
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
         (as linker; production of monomeric calicheamicin derivative
        cytotoxic drug/carrier conjugates)
IT
     65546-95-4, Sephacryl S-200
     RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
         (chromatog.; production of monomeric calicheamicin derivative cytotoxic
        drug/carrier conjugates)
ΙT
     80449-02-1, Tyrosine kinase
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
         (inhibitor; production of monomeric calicheamicin derivative cytotoxic
        drug/carrier conjugates)
     50-69-1, Ribose 50-70-4, Sorbitol, uses 50-81-7, Ascorbic acid, uses 50-99-7, Glucose, uses 56-81-5, Glycerol, uses 56-82-6, Glyceraldehyde 57-48-7, Fructose, uses 57-50-1, Sucrose, uses 58-86-6, Xylose, uses
ΙT
     57-48-7, Fructose, uses 57-50-1, Sucrose, uses 58-86-6, Xylose, 59-05-2, Methotrexate 59-23-4, Galactose, uses 63-42-3, Lactose 65-42-9, Lyxose 69-65-8, Mannitol 69-79-4, Maltose 77-86-1,
     Tromethamine 87-79-6, Sorbose 87-89-8, Inositol 89-65-6, Isoascorbic
     acid 99-20-7, Trehalose 107-21-1, Ethylene glycol, uses 114-04-5, Neuraminic acid 115-77-5, Pentaerythritol, uses 147-81-9, Arabinose
     526-95-4, Gluconic acid 551-84-8, Xylulose 685-73-4, Galacturonic acid
     1398-61-4, Chitin 1758-51-6, Erythrose 2152-76-3, Idose 3416-24-8,
                    3458-28-4, Mannose 5556-48-9, Ribulose 5987-68-8,
     Glucosamine
              6038-51-3, Allose 6556-12-3, Glucuronic acid 6814-36-4,
     Altrose
                        7535-00-4, Galactosamine 7647-14-5, Sodium chloride,
     Mannuronic acid
             9000-07-1, Carrageenan 9000-69-5, Pectins 9004-34-6, Cellulose,
             9004-54-0, Dextran 40,, uses 9004-61-9,
     Hyaluronic acid 9005-25-8, Starch, uses 9005-32-7, Alginic
             9005-65-6, Polysorbate 80, 9005-79-2, Glycogen, uses
                                                                           9005-82-7.
     Amylose 9007-27-6, Chondroitin 9012-36-6, Agarose 9012-72-0, Glucan
     9013-95-0, Levan 9014-63-5, Xylans 9036-88-8, Mannan
                                                                      9037-22-3,
     Amylopectin 9037-55-2, Galactan 9037-90-5, Fructan 9046-38-2,
     Galacturonan 9046-40-6, Pectic acid 9057-02-7, Pullulan 9060-75-7,
```

```
9072-19-9, Fucoidan
                                      11138-66-2, Xanthan gum
     Arabinan
                19163-87-2, Gulose 23140-52-5, Psicose 25322-68-3,
     Tagatose
     Polyethylene glycol 25322-69-4, Polypropylene glycol
                                                                25525-21-7,
                      29884-64-8, Threose 30077-17-9, Talose
     Glucaric acid
                                                                   37331-28-5,
                 40031-31-0, Erythrulose
                                            53106-52-8, Pentose
                                                                   60495-58-1,
                       64612-25-5, Fucan 71927-65-6, Heptose 75634-40-1,
     Galactocarolose
     Dermatan
                93780-23-5, Hexose 169799-44-4, Keratin
                                                              199297-32-0,
     Pentose
     RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
        (production of monomeric calicheamicin derivative cytotoxic drug/carrier
        conjugates)
                                  50-91-9, Floxuridine
IT
     50-18-0, Cyclophosphamide
                                                          51-21-8D,
                                                            52-24-4, Thiotepa
     5-Fluorouracil, derivs.
                                51-75-2, Mechlorethamine
                                                  57-22-7, Vincristine
     53-03-2, Prednisone 53-79-2, Puromycin
                            69-89-6, Xanthine
                                                  70-00-8, Trifluridine
     59-14-3, Broxuridine
                            147-94-4, Cytarabine 320-67-2, Azacitidine
     115-02-6, Azaserine
                                                        1402-38-6, Actinomycin
     671-16-9, Procarbazine 865-21-4, Vinblastine
     1404-00-8, Mitomycin 1404-15-5, Nogalamycin 2353-33-5, Decitabine 3094-09-5, Doxifluridi
                                                       2096-42-6, Gougerotin
                              3094-09-5, Doxifluridine
                                                          4291-63-8, Cladribine
                                                         10540-29-1, Tamoxifen
                              4803-27-4, Anthramycin
     4342-03-4, Dacarbazine
     11056-06-7, Bleomycin 15663-27-1, Cisplatin 20830-81-3, Daunorubicin 21679-14-1, Fludara
                                                     17902-23-7, Tegafur
                                 21679-14-1, Fludarabine
                                                            23214-92-8,
                   25316-40-9, Adriamycin 31698-14-3, Ancitabine
     Doxorubicin
     33069-62-4D, Taxol, analogs
                                    33419-42-0, Etoposide 35846-53-8D,
                          41575-94-4, Carboplatin 50935-04-1, Carubicin
     Maytansin, derivs.
     53910-25-1, Pentostatin 54083-22-6, Zorubicin 56124-62-0, Valrubicin 56420-45-2, Epirubicin 58957-92-9, Idarubicin 60084-10-8, Tiazofurin
                               54083-22-6, Zorubicin
                                                         55726-47-1, Enocitabine
                                                         57576-44-0, Aclarubicin
                                                         62683-29-8,
                                                              71628-96-1,
     Colony-stimulating factor
                                  65271-80-9, Mitoxantrone
                                      95058-81-4, Gemcitabine 108212-76-6,
                 83869-56-1, GM-CSF
     Menogaril
                                 113440-58-7D, Calicheamicin, derivative
     N-Acetyl-γ-calicheamicin
                                 138441-31-3 143011-72-7, G-CSF
                                                                      154361-50-9,
     114797-28-3, Esperamicin
                    157207-90-4, Hemiasterlin 174722-31-7, Rituximab
     Capecitabine
     RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (production of monomeric calicheamicin derivative cytotoxic drug/carrier
        conjugates)
                    623959-73-9
                                                 623959-75-1
                                                                623959-76-2
                                  623959-74-0
ΙT
     623959-72-8
                                                               623959-81-9
                    623959-78-4
                                  623959-79-5
                                                 623959-80-8
     623959-77-3
                                                623959<del>-</del>85-3
                                                               623959-86-4
                                  623959-84-2
     623959-82-0
                   623959-83-1
                                               623959-90-0
                                                                623959-91-1
                                  623959-89-7
     623959-87-5
                   623959-88-6
     623959-92-2
                   623959-93-3
     RL: PRP (Properties)
        (unclaimed nucleotide sequence; production of monomeric calicheamicin
        derivative cytotoxic drug/carrier conjugates)
                                  623959-67-1 623959-68-2 623959-69-3
ΙΤ
     623959-65-9
                    623959-66-0
                    623959-71-7
     623959-70-6
     RL: PRP (Properties)
        (unclaimed protein sequence; production of monomeric calicheamicin
derivative
        cytotoxic drug/carrier conjugates)
                                                                623901-99-5
                                 623901-97-3
                                                 623901-98-4
                   380648-61-3
     145061-00-3
ΙT
     623902-00-1
                   623902-01-2
                                  623902-02-3
                                                 623902-03-4
                                                                623902-04-5
     623902-05-6
                   623960-58-7 623960-59-8
                                                 623960-60-1
                                                                623960-61-2
                                                 623960-66-7
                                                                624752-51-8
     623960-63-4
                   623960-64-5
                                  623960-65-6
     624752-52-9
     RL: PRP (Properties)
        (unclaimed sequence; production of monomeric calicheamicin derivative
cytotoxic
```

drug/carrier conjugates)

IT 9004-61-9, Hyaluronic acid

RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses) (production of monomeric calicheamicin derivative cytotoxic drug/carrier conjugates)

RN 9004-61-9 HCAPLUS

CN Hyaluronic acid (8CI, 9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

IT 53-03-2, Prednisone

RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(production of monomeric calicheamicin derivative cytotoxic drug/carrier conjugates)

RN 53-03-2 HCAPLUS

CN Pregna-1,4-diene-3,11,20-trione, 17,21-dihydroxy- (8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry.

L46 ANSWER 12 OF 65 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2003:818517 HCAPLUS

DN 139:321695

ED Entered STN: 17 Oct 2003

 ${\tt TI}$  Genes showing altered patterns of expression in liver necrosis and their predictive uses

IN Kier, Larry; Nolan, Timothy D.; Sankar, Usha; Derbel, Maher

PA Phase-1 Molecular Toxicology, Inc., USA

SO PCT Int. Appl., 379 pp.

CODEN: PIXXD2

DT Patent

LA English

IC ICM C12N

CC 14-14 (Mammalian Pathological Biochemistry)

Section cross-reference(s): 3, 4

FAN.CNT 1

PATENT NO.						D	DATE			APPLICATION NO.						DATE			
WO 2003085083				A2 A3		20031016			WO 2003-US10141						20030401				
WO 2003085083 WO 2003085083						2004													
					B1		20040923												
	W:	ΑE,	AG,	AL,	AM,	AT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	ΒŻ,	CA,	CH,	CN,		
		CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,		
		GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KΕ,	KG,	KP,	KR,	ΚZ,	LC,	LK,	LR,		
		LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	ΜZ,	NO,	NΖ,	OM,	PH,		
	WO WO	WO 2003 WO 2003 WO 2003	WO 20030850 WO 20030850 WO 20030850 W: AE, CO, GM,	WO 2003085083 WO 2003085083 WO 2003085083 W: AE, AG, CO, CR, GM, HR,	WO 2003085083 WO 2003085083 WO 2003085083 W: AE, AG, AL, CO, CR, CU, GM, HR, HU,	WO 2003085083 A2 WO 2003085083 A3 WO 2003085083 B1 W: AE, AG, AL, AM, CO, CR, CU, CZ, GM, HR, HU, ID,	WO 2003085083 A2 WO 2003085083 A3 WO 2003085083 B1 W: AE, AG, AL, AM, AT, CO, CR, CU, CZ, DE, GM, HR, HU, ID, IL,	WO 2003085083 A2 2003 WO 2003085083 A3 2004 WO 2003085083 B1 2004 W: AE, AG, AL, AM, AT, AU, CO, CR, CU, CZ, DE, DK, GM, HR, HU, ID, IL, IN,	WO 2003085083 A2 20031016 WO 2003085083 A3 20040722 WO 2003085083 B1 20040923 W: AE, AG, AL, AM, AT, AU, AZ, CO, CR, CU, CZ, DE, DK, DM, GM, HR, HU, ID, IL, IN, IS,	WO 2003085083 A2 20031016 WO 2003085083 A3 20040722 WO 2003085083 B1 20040923 W: AE, AG, AL, AM, AT, AU, AZ, BA, CO, CR, CU, CZ, DE, DK, DM, DZ, GM, HR, HU, ID, IL, IN, IS, JP,	WO 2003085083 A2 20031016 WO 2003085083 A3 20040722 WO 2003085083 B1 20040923 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, GM, HR, HU, ID, IL, IN, IS, JP, KE,	WO 2003085083 A2 20031016 WO 2003-WO 2003085083 A3 20040722 WO 2003085083 B1 20040923 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG,	WO 2003085083 A2 20031016 WO 2003-US10 WO 2003085083 A3 20040722 WO 2003085083 B1 20040923 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP,	WO 2003085083 A2 20031016 WO 2003-US10141 WO 2003085083 A3 20040722 WO 2003085083 B1 20040923 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR,	WO 2003085083 A2 20031016 WO 2003-US10141 WO 2003085083 A3 20040722 WO 2003085083 B1 20040923 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ,	WO 2003085083 A2 20031016 WO 2003-US10141 2000003085083 A3 20040722 WO 2003085083 B1 20040923 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,	WO 2003085083 A2 20031016 WO 2003-US10141 20030 WO 2003085083 A3 20040722 WO 2003085083 B1 20040923		

```
PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA,
         UG, UZ, VN, YU, ZA, ZM, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
     US 2004076974
                          Α1
                                  20040422
                                            US 2003-404460
                                                                      20030401
PRAI US 2002-369287P
                          Р
                                  20020401
 PATENT NO.
                 CLASS PATENT FAMILY CLASSIFICATION CODES
                 ----
                         ______
 WO 2003085083 ICM
                        C12N
     Genes that show altered levels of expression in the liver during necrosis
     induced by poisoning are identified for use in predicting liver poisoning
     by novel substances. The invention provides for a method of predicting
     the liver toxicity in an individual to an agent. The method comprises
     obtaining a biol. sample from an individual treated with the agent. The
     expression of one or more liver toxicity predictive genes in the sample is
     measured, wherein the genes are selected from a group consisting of
     partial gene sequences of genes identified as responsive to agents causing
     liver necrosis. The process generates a test expression profile using
     data from several points after exposure to the poison. The test
     expression profile is used with a set of reference expression profiles in a
     Predictive Model to determine whether the agent will induce liver toxicity in
     the individual.
ST
     liver poisoning necrosis gene expression prediction database
IT
     Presenilins
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (1, gene for, intoxication regulation of liver expression of; genes
        showing altered patterns of expression in liver necrosis and their
        predictive uses)
ΙT
     Proteins
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (14-3-3, \zeta isoform, gene for, intoxication regulation of liver
        expression of; genes showing altered patterns of expression in liver
        necrosis and their predictive uses)
ΙT
     Uncoupling protein
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (2, gene for, intoxication regulation of liver expression of; genes
        showing altered patterns of expression in liver necrosis and their
        predictive uses)
ΙT
     Progesterone receptors
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (25DX, gene for, intoxication regulation of liver expression of; genes
        showing altered patterns of expression in liver necrosis and their
        predictive uses)
ΙT
     Connexins
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (32, gene for, intoxication regulation of liver expression of; genes
        showing altered patterns of expression in liver necrosis and their
        predictive uses)
     Apolipoproteins
IT
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
```

RL: BSU (Biological study, unclassified); BIOL (Biological study)

predictive uses) Transport proteins

IT

(A-II, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their

(ADP/ATP carrier, gene for, intoxication regulation of liver expression

- of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Transcription factors
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (ATF-3 (activating transcription factor 3), gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Proteins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (Bax, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Apolipoproteins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (C-I, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Apolipoproteins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (C-III, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Proteins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (C-reactive, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Glycoproteins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (C4bp (complement C4b-binding protein), gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Cyclins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (D1, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Cyclins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (D3, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Proteins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study)
    (DBI (diazepam binding inhibitor), gene for, intoxication regulation of
    liver expression of; genes showing altered patterns of expression in
    liver necrosis and their predictive uses)
- IT Proteins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study)
    (FABP (fatty acid-binding protein), gene for, intoxication regulation
    of liver expression of; genes showing altered patterns of expression in
    liver necrosis and their predictive uses)
- IT Cyclins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study)
    (G, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Transcription factors
  - RL: BSU (Biological study, unclassified); BIOL (Biological study)

(GADD153, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)

- IT Proteins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (GADD45, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Proteins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (GRP78 (glucose-regulated protein, 78 kDa), gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Ferritins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (H chain, Ferritins, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Gene, animal
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (HREV107, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Glycoproteins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study)
    (HRG (histidine-rich glycoprotein), gene for, intoxication regulation
    of liver expression of; genes showing altered patterns of expression in
    liver necrosis and their predictive uses)
- IT Transcription factors
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (ID1 (inhibitor of differentiation 1), gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Proteins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (IF1 (ATPase F1 inhibitor), gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Proteins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (IFRD1 (interferon related developmental regulator 1), gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Insulin-like growth factor-binding proteins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (IGFBP-1, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Insulin-like growth factor-binding proteins
- RL: BSU (Biological study, unclassified); BIOL (Biological study) (IGFBP-3, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Insulin-like growth factor-binding proteins
- RL: BSU (Biological study, unclassified); BIOL (Biological study) (IGFBP-5, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Annexins

- RL: BSU (Biological study, unclassified); BIOL (Biological study) (II, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Protein formation factors
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (IRE-BP (iron-responsive element-binding protein), gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Immunoglobulin receptors
  RL: BSU (Biological study, unclassified); BIOL (Biological study)
  (IgE type I, gene for, intoxication regulation of liver expression of;
  genes showing altered patterns of expression in liver necrosis and
  their predictive uses)
- IT Proteins
  RL: BSU (Biological study, unclassified); BIOL (Biological study)
   (IgE-binding, gene for, intoxication regulation of liver expression of;
   genes showing altered patterns of expression in liver necrosis and
   their predictive uses)
- IT Transcription factors RL: BSU (Biological study, unclassified); BIOL (Biological study) (IkB- $\alpha$  (NF-kB inhibitor  $\alpha$ ), gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Ribosomal proteins
   RL: BSU (Biological study, unclassified); BIOL (Biological study)
   (L13, L13A, gene for, intoxication regulation of liver expression of;
   genes showing altered patterns of expression in liver necrosis and
   their predictive uses)
- IT Ribosomal proteins
  RL: BSU (Biological study, unclassified); BIOL (Biological study)
  (L6, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Antigens
  RL: BSU (Biological study, unclassified); BIOL (Biological study)
  (MAA (melanoma-associated antigen), ME491, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- P-glycoproteins
  RL: BSU (Biological study, unclassified); BIOL (Biological study)
  (MDR1, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- P-glycoproteins
  RL: BSU (Biological study, unclassified); BIOL (Biological study)
  (MDR2, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Histocompatibility antigens RL: BSU (Biological study, unclassified); BIOL (Biological study) (MHC (major histocompatibility complex), class I, RT1.A1(f)  $\alpha$ -chain, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)

- liver necrosis and their predictive uses)
- IT Proteins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (NIPK, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Proteins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study)
    (PAR-interacting, gene for, intoxication regulation of liver expression
    of; genes showing altered patterns of expression in liver necrosis and
    their predictive uses)
- IT Proteins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (PC3, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Proteins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (RCT-102, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Proteins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (RCT-109, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Proteins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (RCT-117, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Proteins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (RCT-119, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Proteins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (RCT-12, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Proteins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (RCT-123, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Proteins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (RCT-127, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Proteins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (RCT-128, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Proteins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (RCT-131, gene for, intoxication regulation of liver expression of;

- genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Proteins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (RCT-137, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Proteins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (RCT-139, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Proteins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (RCT-144, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Proteins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (RCT-145, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Proteins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (RCT-15, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Proteins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (RCT-152, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Proteins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (RCT-154, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Proteins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (RCT-161, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Proteins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (RCT-162, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Proteins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (RCT-164, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Proteins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (RCT-168, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Proteins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study)

- IT Proteins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (RCT-179, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Proteins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (RCT-180, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Proteins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (RCT-181, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Proteins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (RCT-182, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Proteins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (RCT-185, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Proteins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (RCT-189, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Proteins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (RCT-191, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Proteins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (RCT-192, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Proteins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (RCT-200, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Proteins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (RCT-205, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Proteins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (RCT-207, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Proteins

- RL: BSU (Biological study, unclassified); BIOL (Biological study) (RCT-209, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Proteins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (RCT-21, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Proteins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (RCT-213, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Proteins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (RCT-214, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Proteins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (RCT-218, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Proteins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (RCT-225, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Proteins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (RCT-227, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Proteins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (RCT-233, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Proteins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (RCT-239, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Proteins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (RCT-241, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Proteins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (RCT-242, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Proteins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (RCT-252, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)

- IT Proteins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (RCT-256, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Proteins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (RCT-258, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Proteins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (RCT-264, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Proteins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (RCT-270, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Proteins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (RCT-271, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Proteins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (RCT-280, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Proteins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (RCT-288, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Proteins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (RCT-289, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Proteins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (RCT-290, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Proteins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (RCT-291, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Proteins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (RCT-296, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Proteins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (RCT-33, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and

- IT Proteins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (RCT-36, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Proteins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (RCT-37, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Proteins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (RCT-38, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Proteins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (RCT-39, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Proteins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (RCT-40, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Proteins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (RCT-48, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Proteins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (RCT-49, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Proteins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (RCT-50, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Proteins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (RCT-52, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Proteins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (RCT-55, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Proteins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (RCT-64, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Proteins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (RCT-65, gene for, intoxication regulation of liver expression of;

Call Shann Coll shins a collection

- genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Proteins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (RCT-68, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Proteins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (RCT-72, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Proteins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (RCT-78, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Proteins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (RCT-8, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Proteins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (RCT-83, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Proteins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (RCT-88, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Proteins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (RCT-89, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Proteins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (RCT-92, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Proteins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (RCT-98, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Ribosomal proteins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (S17, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Ribosomal proteins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (S8, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Ribosomal proteins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study)

- (S9, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Proteins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (SCP2 (sterol carrier protein 2), gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Gene, animal
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (TP53, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Annexins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (V, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Anion channel
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (VDAC (voltage-dependent anion channel), VDAC2, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Porins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (aquaporin 3, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Transport proteins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (bile acid-sodium-cotransporter, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Gene, animal
  - RL: ANT (Analyte); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study)
    - (c-Ha-ras, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Gene, animal
  - RL: ANT (Analyte); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study)
    - (c-jun, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Gene, animal
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (c-myc, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Proteins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (cofilin, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Elongation factors (protein formation)
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (eEF-lα, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and

```
their predictive uses)
ΙT
     Proteins
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (gap junction-specific, \beta1, gene for, intoxication regulation of
        liver expression of; genes showing altered patterns of expression in
        liver necrosis and their predictive uses)
ΙT
     Dynamin 1
     Fas antigen
     Interleukin 1ß
     Macrophage inflammatory protein 1α
     Proliferating cell nuclear antigen
     Stem cell factor
     Transthyretin
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (gene for, intoxication regulation of liver expression of; genes
        showing altered patterns of expression in liver necrosis and their
        predictive uses)
TT
     Liver
        (genes showing altered patterns of expression in liver necrosis and
        their predictive uses)
TΤ
     Gene expression profiles, animal
        (in liver poisoning; genes showing altered patterns of expression in
        liver necrosis and their predictive uses)
     Canis familiaris
ΙT
     Human
     Primates
     Rattus
        (liver toxicol. in; genes showing altered patterns of expression in
        liver necrosis and their predictive uses)
     Lipopolysaccharides
ΙT
     Polyoxyalkylenes, biological studies
     RL: ADV (Adverse effect, including toxicity); BSU (Biological study,
     unclassified); BIOL (Biological study)
        (liver toxicol. of; genes showing altered patterns of expression in
        liver necrosis and their predictive uses)
ΙT
     Necrosis
     Poisoning, biological
        (liver; genes showing altered patterns of expression in liver necrosis
        and their predictive uses)
ΙT
     Proteins
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (matrins F, gene for, intoxication regulation of liver expression of;
        genes showing altered patterns of expression in liver necrosis and
        their predictive uses)
TΤ
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (matrins G, gene for, intoxication regulation of liver expression of;
        genes showing altered patterns of expression in liver necrosis and
        their predictive uses)
    Chemokine receptors
ΤТ
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (monocyte chemoattractant protein-1, gene for, intoxication regulation
        of liver expression of; genes showing altered patterns of expression in
        liver necrosis and their predictive uses)
TΨ
     Liver, disease
        (necrosis; genes showing altered patterns of expression in liver
        necrosis and their predictive uses)
ΙT
     Transport proteins
```

RL: BSU (Biological study, unclassified); BIOL (Biological study)

(nucleoside transporter, nitrobenzylthiosine-sensitive, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)

- IT Proteins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (nucleosome assembly 1, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Information systems
  - (of liver gene expression data; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Simulation and Modeling, biological
  - (of liver intoxication and necrosis; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Transport proteins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (organic cation transporter, isoform 3, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Proteins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (osteoactivin, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Proteins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (p125FAK, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Enzymes, biological studies
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (peroxisomal multifunctional enzyme 2, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Toxicology
  - (prediction of liver intoxication in; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Albumins, biological studies
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (prepro-, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Proteins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (selenium-containing, P, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Proteins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (senescence marker protein 30, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Proteins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (stathmin, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Collagens, biological studies
  - RL: BSU (Biological study, unclassified); BIOL (Biological study)

- (type II, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Enzymes, biological studies
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (ubiquitin-conjugating, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Proteins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (zinc finger-containing, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Macrophage inflammatory protein 2
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) ( $\alpha$ , gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Tubulins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) ( $\alpha$ -, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Macroglobulins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) ( $\alpha 2$ -, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Actins
  - Tubulins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) ( $\beta$ -, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Integrins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) ( $\beta$ 1, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT Actins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) ( $\gamma$ -, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT 9015-81-0,  $17\beta$ -Hydroxysteroid dehydrogenase
  - RL: BSU (Biological study, unclassified); BIOL (Biological study)  $(17\beta$ -hydroxysteroid dehydrogenase, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT 9035-81-8, Trypsin inhibitor
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (CPi-21, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)
- IT 9001-03-0
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (III, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses)

77106-95-7, Carbonyl reductase ΙT RL: BSU (Biological study, unclassified); BIOL (Biological study) (carbonyl reductase, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses) ΙT 9001-12-1, Matrix metalloproteinase 1 9001-59-6, Pyruvate kinase 9001-62-1, Lipase 9013-66-5, Glutathione peroxidase 9014-34-0, Stearyl-CoA desaturase 9016-12-0, Hypoxanthine-guanine phosphoribosyltransferase 9023-58-9, Arginosuccinate synthetase 9023-93-2, Acetyl-CoA carboxylase 9024-60-6, Ornithine decarboxylase 9026-00-0, Cholesterol esterase 9026-23-7, Carbamyl phosphate synthetase 9026-51-1, Nucleoside diphosphate kinase 9026-67-9, Choline kinase 9027-34-3, Argininosuccinate lyase 9027-44-5, HMG CoA synthase 9028-39-1, 3-Hydroxyisobutyrate dehydrogenase 9028-48-2, NADP-dependent 9028-78**-**8 isocitrate dehydrogenase 9028-86-8, Aldehyde dehydrogenase 9029-78-1, Betaine homocysteine methyltransferase 9031-14-5, 9031-61-2, Thymidylate synthase Lecithin: cholesterol acyltransferase 9032-20-6, NADPH quinone oxidoreductase 9032-25-1, NADH cytochrome b5 9037-21-2, Tryptophan reductase 9033-53-8, Retinol dehydrogenase 9037-53-0, Cholesterol  $7\alpha$ -hydroxylase 9044-85-3, hydroxylase 3β-Hydroxysteroid dehydrogenase 9045-77-6, Fatty acid synthase 9054-89-1, Superoxide dismutase 9074-10-6, Biliverdin reductase 9059-22-7, Heme oxygenase 9068-41-1 9079-10-1, N-Hydroxy-2acetylaminofluorene sulfotransferase 37228-72-1, Glycine methyltransferase 37292-81-2, Cytochrome P450 11A1 60616-82-2, 62229-50-9, Epidermal growth factor 67763-96-6, Cathepsin L Insulin-like growth factor I 71965-46-3, Cathepsin S 78990-62-2, 82785-45-3, Neuropeptide Y 80449-31-6, Bikunin Calpain Thymosin β10 (human) 88943-21-9,  $\alpha$ 1 Inhibitor 3 89964-14-7,  $\alpha$ -Prothymosin 91448-99-6, Cystatin C 117698-12-1, Paraox 137632-07-6, ERK 1 kinase 138069-86-0, Ref-1 endonuclease 117698-12-1, Paraoxonase 141436-78-4, 142805-58-1, MAP Kinase kinase 143180-75-0, DNA Protein kinase C topoisomerase I 144114-16-9, Focal adhesion kinase 147014-97-9, Cyclin dependent kinase 4 148710-29-6, Aflatoxin B1 aldehyde reductase 156681-44-6,  $\alpha$ -Methylacyl CoA racemase 182372-15-2, Caspase 6 289898-51-7, JNK1 protein 191550-14-8, 8-Oxoquanine DNA glycosylase 301166-54-1, PTEN phosphatase 329764-85-4, Cytochrome P450 1A1 330196-93-5, Cytochrome P450 2E1 331823-00-8, Cytochrome P450 2C11 455255-76-2, Cytochrome P450 2D18 331462-98-7, Cytochrome P450 3A1 455255-58-0, Cytochrome P450 2C23 RL: BSU (Biological study, unclassified); BIOL (Biological study) (gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses) ΙT 9001-51-8, Glucokinase RL: BSU (Biological study, unclassified); BIOL (Biological study) (glucokinase, gene for, intoxication regulation of liver expression of; genes showing altered patterns of expression in liver necrosis and their predictive uses) 50-02-2, Dexamethasone 50-06-6, Phenobarbital, biological ΙT 50-18-0, Cyclophosphamide 50-28-2, Estradiol, biological 50-32-8, Benzo[a]pyrene, biological studies 50-53-3, studies Chlorpromazine, biological studies 51-21-8, 5-Fluorouracil 53-79-2, 54-85-3, Isoniazid 55-98-1, Busulfan 56-23-5, Carbon Puromycin tetrachloride, biological studies 56-54-2, Quinidine 58-55-9, Theophylline, biological studies 59-05-2, Methotrexate 60 - 54 - 8. 62-75-9, Dimethylnitrosamine 64-17-5, Ethanol, biological Tetracycline 66-81-9, Cycloheximide 67-66-3, Chloroform, biological studies studies

71-43-2, Benzene, biological studies 86-84-0, 1-Naphthylisocyanate

```
100-63-0, Phenylhydrazine
                             103-90-2, Acetaminophen
                                                        108-86-1,
Bromobenzene, biological studies
                                   127-07-1, Hydroxyurea
                                                             154-93-8,
Carmustine
             446-86-6, Azathioprine
                                       465-65-6, Naloxone
                                                             637 - 07 - 0,
Clofibrate
             1162-65-8, Aflatoxin Bl
                                        1397-89-3, Amphotericin B
1403-66-3, Gentamicin
                         3521-62-8, Erythromycin estolate
                                                             5786-21-0,
            9004-32-4, Carboxymethyl cellulose
                                                  10108-64-2, Cadmium
Clozapine
           10540-29-1, Tamoxifen
                                    15663-27-1, Cisplatin
chloride
                                                             18883-66-4,
Streptozotocin
                 22494-42-4, Diflunisal
                                           23214-92-8, Doxorubicin
25322-68-3, Polyethylene glycol
                                   59865-13-3, Cyclosporin A
                                                                65277-42-1,
Ketoconazole
               82410-32-0, Gancyclovir
RL: ADV (Adverse effect, including toxicity); BSU (Biological study,
unclassified); BIOL (Biological study)
   (liver toxicol. of; genes showing altered patterns of expression in
   liver necrosis and their predictive uses)
302355-88-0, RPTP
RL: BSU (Biological study, unclassified); BIOL (Biological study)
   (receptor protein tyrosine phosphatase D, gene for, intoxication
   regulation of liver expression of; genes showing altered patterns of
   expression in liver necrosis and their predictive uses)
9000-83-3, ATPase
RL: BSU (Biological study, unclassified); BIOL (Biological study)
   (sarcoplasmic reticulum, gene for, intoxication regulation of liver
   expression of; genes showing altered patterns of expression in liver
   necrosis and their predictive uses)
              613690-30-5
613690-29-2
                             613690-31-6
                                           613690-32-7
                                                          613690-33-8
                                                          613690-38-3
613690-34-9
              613690-35-0
                             613690-36-1
                                           613690-37-2
                                                          613690-43-0
613690-39-4
              613690-40-7
                             613690-41-8
                                           613690-42-9
613690-44-1
              613690-45-2
                             613690-46-3
                                           613690-47-4
                                                          61-3690-48-5
613690-49-6
              613690-50-9
                             613690-51-0
                                           613690-52-1
                                                          613690-53-2
                                                          613690-58-7
613690-54-3
              613690-55-4
                             613690-56-5
                                           613690-57-6
613690-59-8
              613690-60-1
                             613690-61-2
                                           613690-62-3
                                                          613690-63-4
                                                          613690-68-9
613690-64-5
              613690-65-6
                             613690-66-7
                                           613690-67-8
613690-69-0
              613690-70-3
                             613690-71-4
                                           613690-72-5
                                                          613690-73-6
613690-74-7
              613690-75-8
                             613690-76-9
                                           613690-77-0
                                                          613690-78-1
                                           613690-82-7
613690-79-2
              613690-80-5
                             613690-81-6
                                                          613690-83-8
                                           613690-87-2
                                                          613690-88-3
613690-84-9
              613690-85-0
                             613690-86-1
                                           613690-92-9
                                                          613690-93-0
613690-89-4
              613690-90-7
                             613690-91-8
                                           613690-97-4
                                                          613690-98-5
613690-94-1
              613690-95-2
                             613690-96-3
                                                          613691-03-5
                             613691-01-3
                                           613691-02-4
613690-99-6 . 613691-00-2
                                           613691-07-9
                                                          613691-08-0
613691-04-6
              613691-05-7
                             613691-06-8
                                                          613691-13-7
                             613691-11-5
                                           613691-12-6
613691-09-1
              613691-10-4
                                           613691-17-1
                                                          613691-18-2
              613691-15-9
                             613691-16-0
613691-14-8
                                                          613691-23-9
613691-19-3
              613691-20-6
                             613691-21-7
                                           613691-22-8
                                           613691-27-3
              613691-25-1
                             613691-26-2
                                                          613691-28-4
613691-24-0
                                                          613691-33-1
                             613691-31-9
                                           613691-32-0
613691-29-5
              613691-30-8
              613691-35-3
                             613691-36-4
                                           613691-37-5
                                                          613691-38-6
613691-34-2
              613691-40-0
                                                          613691-43-3
613691-39-7
                                           613691-42-2
                             613691-41-1
              613691-45-5
                             613691-46-6
                                           613691-47-7
                                                          613691-48-8
613691-44-4
              613691-50-2
                             613691-51-3
                                           613691-52-4
                                                          613691-53-5
613691-49-9
              613691-55-7
                                           613691-57-9
                                                          613691-58-0
613691-54-6
                             613691-56-8
                                           613691-62-6
                                                          613691-63-7
              613691-60-4
                             613691-61-5
613691-59-1
                                           613691-67-1
                                                          613691-68-2
              613691-65-9
                             613691-66-0
613691-64-8
              613691-70-6
                             613691-71-7
                                           613691-72-8
                                                          613691-73-9
613691-69-3
613691-74-0
              613691-75-1
                             613691-76-2
                                           613691-77-3
                                                          613691-78-4
613691-79-5
              613691-80-8
                             613691-81-9
                                           613691-82-0
                                                          613691-83-1
                                                          613691-88-6
613691-84-2
              613691-85-3
                             613691-86-4
                                           613691-87-5
                                                          613691-93-3
613691-89-7
              613691-90-0
                             613691-91-1
                                           613691-92-2
                                           613691-97-7
                                                          613691-98-8
613691-94-4
              613691-95-5
                             613691-96-6
```

IT

ΙT

ΙT

613691-99-9

613692-00-5

613692-03-8

613692-02-7

613692-01-6

```
613692-04-9
                    613692-05-0
                                  613692-06-1
                                                 613692-07-2
                                                               613692-08-3
     613692-09-4
                    613692-10-7
                                  613692-11-8
                                                 613692-12-9
                                                               613692-13-0
     613692-14-1
                    613692-15-2
                                  613692-16-3
                                                 613692-17-4
                                                               613692-18-5
     613692-19-6
                    613692-20-9
                                  613692-21-0
                                                 613692-22-1
                                                               613692-23-2
     613692-24-3
                    613692-25-4
                                  613692-26-5
                                                 613692-27-6
                                                               613692-28-7
     613692-29-8
                    613692-30-1
                                  613692-31-2
                                                 613692-32-3
                                                               613692-33-4
     613692-34-5
                    613692-35-6
                                  613692-36-7
                                                 613692-37-8
                                                               613692-38-9
     613692-39-0
                    613692-40-3
                                  613692-41-4
                                                 613692-42-5
                                                               613692-43-6
     613692-44-7
                    613692-45-8
                                  613692-46-9
                                                 613692-47-0
                                                               613692-48-1
     613692-49-2
                    613692-50-5
                                  613692-51-6
                                                 613692-52-7
                                                               613692-53-8
     613692-54-9
                    613692-55-0
                                  613692-56-1
                                                 613692-57-2
                                                               613692-58-3
     613692-59-4
                    613692-60-7
                                  613692-61-8
                                                 613692-62-9
                                                               613692-63-0
     613692-64-1
                    613692-65-2
                                  613692-66-3
                                                 613692-67-4
                                                               613692-68-5
     RL: PRP (Properties)
        (unclaimed nucleotide sequence; genes showing altered patterns of
        expression in liver necrosis and their predictive uses)
ΙT
                    613692-70-9
     613692-69-6
                                  613692-71-0
                                                 613692-72-1
                                                               613692-73-2
     613692-74-3
                    613692-75-4
                                  613692-76-5
                                                 613692-77-6
                                                               613692-78-7
     613692-79-8
                    613692-80-1
                                                 613692-82-3
                                  613692-81-2
                                                               613692-83-4
     613692-84-5
                    613692-85-6
                                  613692-86-7
                                                 613692-87-8
                                                               613692-88-9
                                                               613692-93-6
     613692-89-0
                    613692-90-3
                                  613692-91-4
                                                 613692-92-5
     613692-94-7
     RL: PRP (Properties)
        (unclaimed nucleotide sequence; genes showing altered patterns of
        expression in liver necrosis and their predictive uses)
     9014-08-8, Enolase
TT
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (\alpha, \text{ gene for, intoxication regulation of liver expression of;}
        genes showing altered patterns of expression in liver necrosis and
        their predictive uses)
     9012-90-2, DNA polymerase
ΙT
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (β, gene for, intoxication regulation of liver expression of;
        genes showing altered patterns of expression in liver necrosis and
        their predictive uses)
     50-02-2, Dexamethasone
TΤ
     RL: ADV (Adverse effect, including toxicity); BSU (Biological study,
     unclassified); BIOL (Biological study)
        (liver toxicol. of; genes showing altered patterns of expression in
        liver necrosis and their predictive uses)
     50-02-2 HCAPLUS
RN
     Pregna-1,4-diene-3,20-dione, 9-fluoro-11,17,21-trihydroxy-16-methyl-,
CN
```

(CA INDEX NAME)

Absolute stereochemistry.

 $(11\beta, 16\alpha) - (9CI)$ 

```
L46 ANSWER 13 OF 65 HCAPLUS COPYRIGHT 2004 ACS on STN
    2003:678606 HCAPLUS
ΑN
    139:197709
DN
    Entered STN: 29 Aug 2003
ED
    macrolide erythromycin conjugates of biologically active
TТ
    compounds, methods for their preparation and use, formulation, and
    pharmaceutical applications thereof
    Burnet, Michael; Guse, Jan-Hinrich; Gutke, Hans-Jurgen; Beck, Albert;
IN
    Tsotsou, Georgia; Droste-Borel, Irina; Reichert, Jeannette; Luyten,
    Kattie; Busch, Maximilian; Wolff, Michael; Khobzaoui, Moussa; Margutti,
    Simona; Meindl, Thomas; Kim, Gene; Barker, Laurence
PA
    Sympore G.m.b.H., Germany
    PCT Int. Appl., 183 pp.
SO
    CODEN: PIXXD2
DT
    Patent
    English
LA
    ICM A61K
IC
    33-7 (Carbohydrates)
CC
    Section cross-reference(s): 1, 15, 63
FAN.CNT 2
                      KIND
                             DATE APPLICATION NO. DATE
    PATENT NO.
    _____
                       ____
                              _____
                                         -----
    WO 2003070174
                              20030828 WO 2003-US4609
                       A2
                                                           20030214
PΙ
                    A2 2003
A3 20031113
    WO 2003070174
        W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
            CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
            GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
            LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
            PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ,
            UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
        RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
            KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
            FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF,
            BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
PRAI US 2002-357434P P
                              20020215
CLASS
PATENT NO. CLASS PATENT FAMILY CLASSIFICATION CODES
WO 2003070174 ICM
                      A61K
OS MARPAT 139:197709
GΙ
```

Me Me Me Me NMe NMe NMe NMe NMe NMe 
$$C1$$

R1 =  $C1$ 

Erythromycin macrolide conjugates T-(L-C)m, wherein T is a transportophore, L is a bond or a linker having a mol. weight up to 240 dalton, C is a non-antibiotic therapeutic agent, and m is 1-8, in which the transportophore has an immune selectivity ratio of at least 2, the transportophore is covalently bonded to the non-antibiotic therapeutic agent via the bond or the linker, and the compound has an immune selectivity ratio of at least 2, useful for enhancing efficacy of a therapeutic agent. Thus, macrolide I (R = R1) was prepared in 76% yield via coupling of I (R = H) with diclofenac as antitumor and antibacterial agent and was tested in vitro for its cytotoxicity and immunosuppressive activity using a mouse skin transplant model.

ST human antiinflammatory vaccine immunosuppression antibacterial antitumor erythromycin prepn cytotoxicity; antiinflammatory vaccine immunosuppression antibacterial antitumor glycoside macrolide prepn erythromycin

IT Infection

(bacterial; macrolide erythromycin **conjugates** of biol. active compds. methods for their preparation and use formulation and pharmaceutical applications thereof)

IT Anti-inflammatory agents

Antibacterial agents

Antibiotics

Antitumor agents

Cytotoxicity

Human

Inflammation

Neoplasm

Skin

Vaccines

(macrolide erythromycin conjugates of biol. active compds. methods for their preparation and use formulation and pharmaceutical applications thereof)

IT Glycosides

```
RL: IMF (Industrial manufacture); PAC (Pharmacological activity); SPN
     (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study);
     PREP (Preparation); USES (Uses)
        (macrolide erythromycin conjugates of biol. active compds.
        methods for their preparation and use formulation and pharmaceutical
        applications thereof)
IT
     Antibiotics
        (macrolide; macrolide erythromycin conjugates of biol. active
        compds. methods for their preparation and use formulation and pharmaceutical
        applications thereof)
ΙT
     586410-99-3P
     RL: IMF (Industrial manufacture); PAC (Pharmacological activity); RCT
     (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL
     (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES
        (macrolide erythromycin conjugates of biol. active compds.
       methods for their preparation and use formulation and pharmaceutical
        applications thereof)
IT
     531-75-9P
                 96100-89-9P
                               152235-41-1P
                                              235436-93-8P
                                                             276245-85-3P
     501002-55-7P
                    586410-56-2P
                                   586410-57-3P
                                                  586410-58-4P
                                                                 586410-59-5P
     586410-60-8P
                    586410-61-9P
                                   586410-62-0P
                                                  586410-63-1P
                                                                  586410-64-2P
     586410-65-3P
                    586410-66-4P
                                   586410-67-5P
                                                  586410-68-6P
                                                                  586410-69-7P
     586410-70-0P
                    586410-71-1P
                                   586410-72-2P
                                                  586410-73-3P
                                                                  586410-74-4P
     586410-76-6P
                    586410-78-8P
                                   586410-80-2P
                                                  586410-82-4P
                                                                  586410-84-6P
     586410-86-8P
                    586410-87-9P
                                   586410-88-0P
                                                  586410-89-1P
                                                                  586410-90-4P
     586410-92-6P
                    586410-94-8P
                                   586411-18-9P
                                                  586411-20-3P
                                                                  586411-22-5P
     586411-24-7P
                    586411-26-9P
                                   586411-28-1P
                                                  586411-30-5P
                                                                  586411-32-7P
     586411-37-2P
                    586411-39-4P
                                   586411-43-0P
                                                  586411-45-2P
                                                                  586411-47-4P
     586411-49-6P
                    586411-53-2P
                                   586411-59-8P
                                                  586411-65-6P
                                                                 586411-72-5P
     586411-74-7P
                    586411-78-1P 586411-80-5P
                                                586411-82-7P
                                 586411-88-3P
     586411-84-9P 586411-86-1P
                                                586411-90-7P
     586411-92-9P
                    586411-94-1P
                                   586411-98-5P
                                                  586412-01-3P
                                                                 586412-06-8P
     586412-18-2P
                    586412-26-2P
                                   586412-30-8P
                                                  586412-34-2P
                                                                 586412-38-6P
     RL: IMF (Industrial manufacture); PAC (Pharmacological activity); SPN
     (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study);
     PREP (Preparation); USES (Uses)
        (macrolide erythromycin conjugates of biol. active compds.
       methods for their preparation and use formulation and pharmaceutical
        applications thereof)
ΙT
     586411-06-5P
     RL: IMF (Industrial manufacture); PAC (Pharmacological activity); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
        (macrolide erythromycin conjugates of biol. active compds.
       methods for their preparation and use formulation and pharmaceutical
        applications thereof)
                              117693-41-1P 117693-42-2P
                                                           128305-54-4P
     516-12-1P
                5786-56-1P
ΙT
                                                  586411-10-1P
                    586411-03-2P 586411-08-7P
                                                                586411-12-3P
     586411-01-0P
     586411-14-5P
                                   586411-51-0P
                                                  586411-56-5P
                                                                 586411-63-4P
                    586411-16-7P
                                                  586412-09-1P
     586411-67-8P
                    586411-96-3P
                                   586412-03-5P
                                                                 586412-12-6P
                                   586412-21-7P
                                                  586412-23-9P
                                                                 586412-28-4P
     586412-14-8P
                    586412-16-0P
     586412-43-3P
     RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic
     preparation); PREP (Preparation); RACT (Reactant or reagent)
        (macrolide erythromycin conjugates of biol. active compds.
       methods for their preparation and use formulation and pharmaceutical
        applications thereof)
     586411-76-9
ΙT
     RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
```

```
(Biological study); USES (Uses)
        (macrolide erythromycin conjugates of biol. active compds.
        methods for their preparation and use formulation and pharmaceutical
        applications thereof)
     50-02-2, Dexamethasone 50-24-8, Prednisolone
ΙT
                                                     50-78-2
     53-86-1, Indomethacin
                            56-53-1
                                        61-68-7, Mefenamic acid 76-25-5
     , Triamcinolone acetonide
                                 105-36-2, Ethyl bromoacetate 108-30-5,
     Succinic anhydride, reactions
                                      109-83-1
                                               110-91-8, Morpholine, reactions
     110-94-1, Glutaric acid
                               305-03-3, Chlorambucil
                                                         531-76-0
                                                                   644-62-2,
     Meclofenamic acid
                         2067-33-6, 5-Bromovaleric acid
                                                           2304-94-1
                               15307-86-5, Diclofenac
     5104-49-4, Flurbiprofen
                                                         15687-27-1, Ibuprofen
                  24280-93-1, Mycophenolic acid
                                                 25812-30-0, Gemfibrozil
     16471-29-7
     30516-87-1, AZT
                       32483-51-5
                                    75330-75-5, Lovastatin
                                                              83905-01-5
                              88404-25-5 111321-02-9
     86386-73-4, Fluconazole
                                                          152460-10-1
                              192564-13-9, Neotrofin
     169590-42-5, Celecoxib
                                                       264621-05-8
     501121-34-2
                   586411-35-0
                                 586411-61-2
                                               586411-69-0
                                                              586412-36-4
     586412-40-0
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (macrolide erythromycin conjugates of biol. active compds.
        methods for their preparation and use formulation and pharmaceutical
        applications thereof)
ΙT
     586411-80-5P 586411-84-9P 586411-86-1P
     RL: IMF (Industrial manufacture); PAC (Pharmacological activity); SPN
     (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study);
     PREP (Preparation); USES (Uses)
        (macrolide erythromycin conjugates of biol. active compds.
        methods for their preparation and use formulation and pharmaceutical
        applications thereof)
     586411-80-5 HCAPLUS
RN
CN
     1-Oxa-6-azacyclopentadecan-15-one, 13-[(2,6-dideoxy-3-C-methyl-3-O-methyl-
     \alpha-L-ribo-hexopyranosyl)oxy]-2-ethyl-3,4,10-trihydroxy-
     3,5,6,8,10,12,14-heptamethyl-11-[[3,4,6-trideoxy-3-(dimethylamino)-2-0-[4-
     [(11\beta, 16\alpha) - 9 - fluoro - 11, 17 - dihydroxy - 16 - methyl - 3, 20 - dioxopregna-
     1, 4-dien-21-yl]oxy]-1, 4-dioxobutyl]-\beta-D-xylo-hexopyranosyl]oxy]-,
     (2R, 3S, 4R, 5R, 8R, 10R, 11R, 12S, 13S, 14R) - (9CI) (CA INDEX NAME)
```

Absolute stereochemistry.

## PAGE 1-B

RN 586411-84-9 HCAPLUS

CN 1-0xa-6-azacyclopentadecane-13,15-dione, 2-ethyl-3,4,10-trihydroxy-3,5,6,8,10,12,14-heptamethyl-11-[[3,4,6-trideoxy-3-(dimethylamino)-2-O-[4-[[(11 $\beta$ ,16 $\alpha$ )-9-fluoro-11-hydroxy-16,17-[(1-methylethylidene)bis(oxy)]-3,20-dioxopregna-1,4-dien-21-yl]oxy]-1,4-dioxobutyl]- $\beta$ -D-xylo-hexopyranosyl]oxy]-, (2R,3S,4R,5R,8R,10R,11R,12R,14R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-B

RN 586411-86-1 HCAPLUS

CN 1-Oxa-6-azacyclopentadecane-13,15-dione, 2-ethyl-3,4,10-trihydroxy-3,5,6,8,10,12,14-heptamethyl-11-[[3,4,6-trideoxy-2-O-[4-[[(11 $\beta$ )-11,17-dihydroxy-3,20-dioxopregna-1,4-dien-21-yl]oxy]-1,4-dioxobutyl]-3-(dimethylamino)- $\beta$ -D-xylo-hexopyranosyl]oxy]-, (2R,3S,4R,5R,8R,10R,11R,12R,14R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

Ме

PAGE 1-B

50-02-2, Dexamethasone 50-24-8, Prednisolone 76-25-5, Triamcinolone acetonide ΙT

RL: RCT (Reactant); RACT (Reactant or reagent) (macrolide erythromycin conjugates of biol. active compds. methods for their preparation and use formulation and pharmaceutical applications thereof)

RN 50-02-2 HCAPLUS

Pregna-1, 4-diene-3, 20-dione, 9-fluoro-11, 17, 21-trihydroxy-16-methyl-, CN (CA INDEX NAME)  $(11\beta, 16\alpha) - (9CI)$ 

Absolute stereochemistry.

RN 50-24-8 HCAPLUS

Pregna-1, 4-diene-3, 20-dione, 11, 17, 21-trihydroxy-,  $(11\beta)$ - (9CI) CN INDEX NAME)

Absolute stereochemistry.

RN 76-25-5 HCAPLUS

Pregna-1,4-diene-3,20-dione, 9-fluoro-11,21-dihydroxy-16,17-[(1-CN methylethylidene)bis(oxy)]-, ( $11\beta$ ,  $16\alpha$ )- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

```
L46 ANSWER 14 OF 65 HCAPLUS COPYRIGHT 2004 ACS on STN
```

2003:678605 HCAPLUS ΑN

139:197708 DN

Entered STN: 29 Aug 2003 ED

- macrolide erythromycin conjugates of biologically active TIcompounds, methods for their preparation and use, formulation, and pharmaceutical applications thereof
- Burnet, Michael; Guse, Jan-Hinrich; Kim, Gene; Beck, Albert; Tsotsou, Georgia; Droste-Borel, Irina; Barker, Laurence; Wolff, Michael; Gutke, IN Hans-Jurgen
- PΑ Sympore G.m.b.H., Germany
- SO PCT Int. Appl., 164 pp.

CODEN: PIXXD2

DT Patent

LA English

IC

ICM A61K
33-7 (Carbohydrates) CC

Section cross-reference(s): 1, 15, 63

FAN.	CNT	1																	
	PATENT NO.						D	DATE		APPLICATION NO.						DATE			
							-									-			
ΡI	WO	2003	A2		20030828		1	WO 2	003-		20030214								
	WO	2003	А3		2003	1204													
		W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	AZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,	
			CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	
			GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KZ,	LC,	LK,	LR,	
			LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	ΜZ,	NO,	ΝZ,	OM,	PH,	
			PL,	PT,	RO,	RU,	SD,	SE,	SG,	SK,	SL,	ТJ,	TM,	TN,	TR,	TT,	ΤZ,	UA,	
			UG,	US,	UZ,	VN,	YU,	ZA,	ZM,	ZW									
		RW:	GH,	GM,	KE,	LS,	MW,	ΜZ,	SD,	SL,	SZ,	ΤZ,	UG,	ZM,	ZW,	ΑM,	ΑZ,	BY,	
			KG,	KZ,	MD,	RU,	TJ,	TM,	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	
			FI,	FR,	GB,	GR,	HU,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	SI,	SK,	TR,	BF,	
								GA,											
	US 2004005641					A1	A1 20040108				US 2003-367624						20030214		
PRAI US 2002-357589P					P		2002	0215											
CLAS	S																		

PATENT NO. CLASS PATENT FAMILY CLASSIFICATION CODES \_\_\_\_\_\_

WO 2003070173 ICM A61K OS MARPAT 139:197708

GΙ

AB Erythromycin macrolide **conjugates** T-(L-C)m, wherein T is a transportophore, L is a bond or a linker having a mol. weight up to 240 **dalton**, C is a non-antibiotic therapeutic agent, and m is 1-8, in which the transportophore has an immune selectivity ratio of at least 2, the transportophore is covalently bonded to the non-antibiotic therapeutic agent via the bond or the linker, and the compound has an immune selectivity ratio of at least 2, useful for enhancing efficacy of a therapeutic agent. Thus, macrolide I (R = R1) was prepared in 76% yield via coupling of I (R = H) with diclofenac as antitumor and antibacterial agent and was tested in vitro for its cytotoxicity and immunosuppressive activity using a mouse skin transplant model.

ST human antiinflammatory vaccine immunosuppression antibacterial antitumor erythromycin prepn cytotoxicity; antiinflammatory vaccine immunosuppression antibacterial antitumor glycoside macrolide prepn erythromycin

IT Infection

(bacterial; macrolide erythromycin conjugates of biol. active compds. methods for their preparation and use formulation and pharmaceutical applications thereof)

IT Anti-inflammatory agents
Antibacterial agents
Antibiotics
Antitumor agents
Cytotoxicity
Human
Inflammation

```
Neoplasm
     Skin
     Vaccines
        (macrolide erythromycin conjugates of biol. active compds.
        methods for their preparation and use formulation and pharmaceutical
        applications thereof)
IT
     Glycosides
     RL: IMF (Industrial manufacture); PAC (Pharmacological activity); SPN
     (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study);
     PREP (Preparation); USES (Uses)
        (macrolide erythromycin conjugates of biol. active compds.
        methods for their preparation and use formulation and pharmaceutical
        applications thereof)
ΙT
    Antibiotics
        (macrolide; macrolide erythromycin conjugates of biol. active
        compds. methods for their preparation and use formulation and pharmaceutical
        applications thereof)
IT
     586410-99-3P
     RL: IMF (Industrial manufacture); PAC (Pharmacological activity); RCT
     (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL
     (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES
     (Uses)
        (macrolide erythromycin conjugates of biol. active compds.
       methods for their preparation and use formulation and pharmaceutical
        applications thereof)
                                                             276245-85-3P
                               152235-41-1P
                                              235436-93-8P
IT
     531-75-9P
                 96100-89-9P
                                   586410-57-3P
                                                                 586410-59-5P
     501002-55-7P
                                                  586410-58-4P
                    586410-56-2P
                                   586410-62-0P
                                                  586410-63-1P
                                                                 586410-64-2P
     586410-60-8P
                    586410-61-9P
                                   586410-67-5P
                                                  586410-68-6P
                                                                 586410-69-7P
     586410-65-3P
                    586410-66-4P
                                                  586410-73-3P
                                   586410-72-2P
                                                                 586410-74-4P
     586410-70-0P
                    586410-71-1P
     586410-76-6P
                    586410-78-8P
                                   586410-80-2P
                                                  586410-82-4P
                                                                 586410-84-6P
     586410-86-8P
                    586410-87-9P
                                                  586410-89-1P
                                                                 586410-90-4P
                                   586410-88-0P
     586410-92-6P
                    586410-94-8P
                                                  586411-20-3P
                                   586411-18-9P
                                                                 586411-22-5P
     586411-24-7P
                    586411-26-9P
                                   586411-28-1P
                                                  586411-30-5P
                                                                 586411-32-7P
     586411-37-2P
                    586411-39-4P
                                   586411-43-0P
                                                  586411-45-2P
                                                                 586411-47-4P
                    586411-53-2P 586411-59-8P
                                                  586411-65-6P
                                                                 586411-72-5P
     586411-49-6P
     586411-74-7P 586411-78-1P 586411-80-5P 586411-82-7P
     586411-84-9P 586411-86-1P 586411-88-3P
                                                586411-90-7P
                  586411-94-1P
                                 586411-98-5P
                                                  586412-01-3P
                                                                 586412-06-8P
     586411-92-9P
                    586412-26-2P
     586412-18-2P
                                   586412-30-8P
                                                  586412-34-2P
                                                                 586412-38-6P
     RL: IMF (Industrial manufacture); PAC (Pharmacological activity); SPN
     (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
        (macrolide erythromycin conjugates of biol. active compds.
        methods for their preparation and use formulation and pharmaceutical
        applications thereof)
ΙT
     586411-06-5P
     RL: IMF (Industrial manufacture); PAC (Pharmacological activity); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
     (Uses)
        (macrolide erythromycin conjugates of biol. active compds.
        methods for their preparation and use formulation and pharmaceutical
        applications thereof)
                 5786-56-1P
     516-12-1P
                              117693-41-1P 117693-42-2P
                                                           128305-54-4P
ΙT
                    586411-03-2P
                                   586411-08-7P 586411-10-1P
     586411-01-0P
                                                                 586411-12-3P
                                                                 586411-63-4P
     586411-14-5P
                    586411-16-7P
                                   586411-51-0P
                                                  586411-56-5P
                                   586412-03-5P
                                                  586412-09-1P
                                                                 586412-12-6P
     586411-67-8P
                    586411-96-3P
                                   586412-21-7P
                                                  586412-23-9P
                                                                 586412-28-4P
     586412-14-8P
                    586412-16-0P
```

586412-43-3P

```
RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic
            preparation); PREP (Preparation); RACT (Reactant or reagent)
                   (macrolide erythromycin conjugates of biol. active compds.
                   methods for their preparation and use formulation and pharmaceutical
                   applications thereof)
IT
            586411-76-9
            RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
            (Biological study); USES (Uses)
                   (macrolide erythromycin conjugates of biol. active compds.
                   methods for their preparation and use formulation and pharmaceutical
                   applications thereof)
            50-02-2, Dexamethasone 50-24-8, Prednisolone
                                                                                                                           50-78-2
IΤ
            53-86-1, Indomethacin
                                                                   56-53-1
                                                                                            61-68-7, Mefenamic acid 76-25-5
            , Triamcinolone acetonide 105-36-2, Ethyl bromoacetate 108-30-5,
            Succinic anhydride, reactions
                                                                                       109-83-1 110-91-8, Morpholine, reactions
            110-94-1, Glutaric acid
                                                                      305-03-3, Chlorambucil
                                                                                                                                    531-76-0
                                                           2067-33-6, 5-Bromovaleric acid
           Meclofenamic acid
                                                                                                                                         2304-94-1
           5104-49-4, Flurbiprofen 15307-86-5, Diclo
16471-29-7 24280-93-1, Mycophenolic acid
                                                                       15307-86-5, Diclofenac
                                                                                                                                    15687-27-1, Ibuprofen
                                                                                                                      25812-30-0, Gemfibrozil
            30516-87-1, AZT
                                                                                    75330-75-5, Lovastatin
                                                       32483-51-5
                                                                                                                                                83905-01-5
            86386-73-4, Fluconazole
                                                                        88404-25-5
                                                                                                       111321-02-9
                                                                                                                                       152460-10-1
                                                                       192564-13-9, Neotrofin
            169590-42-5, Celecoxib
                                                                                                                                264621-05-8
            501121-34-2
                                             586411-35-0
                                                                              586411-61-2
                                                                                                               586411-69-0
                                                                                                                                                586412-36-4
            586412-40-0
            RL: RCT (Reactant); RACT (Reactant or reagent)
                   (macrolide erythromycin conjugates of biol. active compds.
                  methods for their preparation and use formulation and pharmaceutical
                   applications thereof)
            586411-80-5P 586411-84-9P 586411-86-1P
            RL: IMF (Industrial manufacture); PAC (Pharmacological activity); SPN
            (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study);
            PREP (Preparation); USES (Uses)
                   (macrolide erythromycin conjugates of biol. active compds.
                  methods for their preparation and use formulation and pharmaceutical
                   applications thereof)
            586411-80-5 HCAPLUS
RN
            1-Oxa-6-azacyclopentadecan-15-one, 13-[(2,6-dideoxy-3-C-methyl-3-O-methyl-
CN
            \alpha-L-ribo-hexopyranosyl)oxy]-2-ethyl-3,4,10-trihydroxy-
            3,5,6,8,10,12,14-heptamethyl-11-[[3,4,6-trideoxy-3-(dimethylamino)-2-0-[4-
             \begin{tabular}{l} [[(11\beta,16\alpha)-9-fluoro-11,17-dihydroxy-16-methyl-3,20-dioxopregna-12] (11\beta,16\alpha)-9-fluoro-11,17-dihydroxy-16-methyl-3,20-dioxopregna-12] (11\beta,16\alpha)-9-fluoro-11,17-dihydroxy-16-methyl-3,20-dioxopregna-12] (11\beta,16\alpha)-9-fluoro-11,17-dihydroxy-16-methyl-3,20-dioxopregna-12] (11\beta,16\alpha)-9-fluoro-11,17-dihydroxy-16-methyl-3,20-dioxopregna-12] (11\beta,16\alpha)-9-fluoro-11,17-dihydroxy-16-methyl-3,20-dioxopregna-12] (11\beta,16\alpha)-9-fluoro-11,17-dihydroxy-16-methyl-3,20-dioxopregna-12] (11\beta,16\alpha)-9-fluoro-11,17-dihydroxy-16-methyl-3,20-dioxopregna-12] (11\beta,16\alpha)-12] (11\beta,16\alpha)-
            1, 4-dien-21-yl]oxy]-1, 4-dioxobutyl]-\beta-D-xylo-hexopyranosyl]oxy]-,
            (2R, 3S, 4R, 5R, 8R, 10R, 11R, 12S, 13S, 14R) - (9CI) (CA INDEX NAME)
```

Absolute stereochemistry.

PAGE 1-A

# PAGE 1-B

RN 586411-84-9 HCAPLUS

CN 1-Oxa-6-azacyclopentadecane-13,15-dione, 2-ethyl-3,4,10-trihydroxy-3,5,6,8,10,12,14-heptamethyl-11-[[3,4,6-trideoxy-3-(dimethylamino)-2-O-[4-[[(11 $\beta$ ,16 $\alpha$ )-9-fluoro-11-hydroxy-16,17-[(1-methylethylidene)bis(oxy)]-3,20-dioxopregna-1,4-dien-21-yl]oxy]-1,4-dioxobutyl]- $\beta$ -D-xylo-hexopyranosyl]oxy]-, (2R,3S,4R,5R,8R,10R,11R,12R,14R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-B

RN 586411-86-1 HCAPLUS

CN 1-0xa-6-azacyclopentadecane-13,15-dione, 2-ethyl-3,4,10-trihydroxy-3,5,6,8,10,12,14-heptamethyl-11-[[3,4,6-trideoxy-2-0-[4-[[(11 $\beta$ )-11,17-dihydroxy-3,20-dioxopregna-1,4-dien-21-yl]oxy]-1,4-dioxobutyl]-3-(dimethylamino)- $\beta$ -D-xylo-hexopyranosyl]oxy]-, (2R,3S,4R,5R,8R,10R,11R,12R,14R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

Me\_

R <u>М</u>е .. OH S Ö НО₄ Ме S Me2N S <u>М</u>е S S R Н Н

PAGE 1-B

IT

50-02-2, Dexamethasone 50-24-8, Prednisolone 76-25-5, Triamcinolone acetonide RL: RCT (Reactant); RACT (Reactant or reagent) (macrolide erythromycin conjugates of biol. active compds. methods for their preparation and use formulation and pharmaceutical

applications thereof)

RN 50-02-2 HCAPLUS

Pregna-1, 4-diene-3, 20-dione, 9-fluoro-11, 17, 21-trihydroxy-16-methyl-, CN  $(11\beta, 16\alpha) - (9CI)$ (CA INDEX NAME)

Absolute stereochemistry.

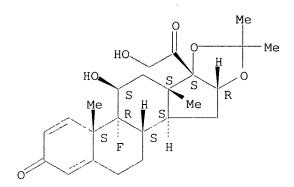
RN 50-24-8 HCAPLUS

Pregna-1,4-diene-3,20-dione, 11,17,21-trihydroxy-, (11β)- (9CI) CN INDEX NAME)

RN 76-25-5 HCAPLUS

CN Pregna-1,4-diene-3,20-dione, 9-fluoro-11,21-dihydroxy-16,17-[(1-methylethylidene)bis(oxy)]-,  $(11\beta,16\alpha)$ - (9CI) (CA INDEX NAME)

# Absolute stereochemistry.



L46 ANSWER 15 OF 65 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2003:599457 HCAPLUS

DN 140:139633

ED Entered STN: 05 Aug 2003

TI Preparation of enzyme **conjugate** through adipic acid dihydrazide as linker and its use in immunoassays

AU Basu, Anupam; Shrivastav, Tulsidas G.; Kariya, Kiran P.

CS Department of Reproductive Biomedicine, National Institute of Health and Family Welfare, New Delhi, 110067, India

SO Clinical Chemistry (Washington, DC, United States) (2003), 49(8), 1410-1412
CODEN: CLCHAU; ISSN: 0009-9147

American Association for Clinical Chemistry

DT Journal

PB

LA English

CC 2-1 (Mammalian Hormones)

Section cross-reference(s): 7

The use of adipic acid dihydrazide (ADH) as a linking reagent between AΒ glycoenzyme (HRP) and a steroid carboxylic derivative to prepare enzyme conjugate for ELISA is described. The conjugation of horseradish peroxidase (HRP) to cortisol through ADH as the link was carried out. HRP-ADH was conjugated to the carboxylic group of cortisol by the activated ester method for developing competitive direct ELISA. The hydrazide-containing reagents provide a built-in spacer to accommodate greater steric accessibility. Results showed that the use of a linking reagent in the enzyme conjugate increases the detection limit of the competitive immunoassay. The improvement in the detection limit may be caused by the linker group preventing steric hindrance. The lower detection limit of the competitive immunoassay with the use of a HRP-ADH reagent may be treated as an added advantage apart from overcoming the hurdles of direct conjugation with HRP. The HRP-ADH reagent may also be used for coupling to nucleic acid for nucleic acid hybridization assays and to proteins for preparing enzyme conjugates for immuno-assay and immunochem., and may also be useful for staining glycoproteins and other glycoconjugates on protein blots after periodate oxidation

ST cortisol immunoassay conjugate adipic acid dihydrazide

```
horseradish peroxidase
IT
     Immunoassay
        (enzyme-linked immunosorbent assay; preparation of horseradish peroxidase
        conjugate through adipic acid dihydrazide as linker and its use
        in immunoassays)
ΙT
     9003-99-0DP, Peroxidase, conjugate with cortisol-21-
     hemisuccinate through adipic acid dihydrazide spacer
     RL: ARG (Analytical reagent use); BSU (Biological study, unclassified);
     PNU (Preparation, unclassified); ANST (Analytical study); BIOL (Biological
     study); PREP (Preparation); USES (Uses)
        (horseradish; preparation of horseradish peroxidase conjugate
        through adipic acid dihydrazide as linker and its use in immunoassays)
     9003-99-0DP, Peroxidase, conjugate with adipic acid dihydrazide
ΤT
     RL: PNU (Preparation, unclassified); RCT (Reactant); PREP (Preparation);
     RACT (Reactant or reagent)
        (horseradish; preparation of horseradish peroxidase conjugate
        through adipic acid dihydrazide as linker and its use in immunoassays)
     9003-99-0, Peroxidase
ΙT
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (horseradish; preparation of horseradish peroxidase conjugate
        through adipic acid dihydrazide as linker and its use in immunoassays)
IT
     50-23-7, Cortisol
     RL: ANT (Analyte); BSU (Biological study, unclassified); ANST (Analytical
     study); BIOL (Biological study)
        (preparation of horseradish peroxidase conjugate through adipic
        acid dihydrazide as linker and its use in immunoassays)
     1071-93-8, Adipic acid dihydrazide
TΤ
     RL: NUU (Other use, unclassified); RCT (Reactant); RACT (Reactant or
     reagent); USES (Uses)
        (preparation of horseradish peroxidase conjugate through adipic
        acid dihydrazide as linker and its use in immunoassays)
ΤТ
     2203-97-6, Cortisol-21-hemisuccinate
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (preparation of horseradish peroxidase conjugate through adipic
        acid dihydrazide as linker and its use in immunoassays)
              THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE.CNT
      16
(1) Basu, A; J Immunoassay 2000, V21, P39 HCAPLUS
(2) Bayer, E; Methods Enzymol 1990, V184, P174 HCAPLUS
(3) Boorsma, D; J Immunol Methods 1979, V30, P245 MEDLINE
(4) Dent, A; Bioconjugation: protein coupling techniques for the biomedical
    sciences 1998, P120
(5) Dent, A; Bioconjugation: protein coupling techniques for the biomedical
    sciences 1998, P121
(6) Dent, A; Bioconjugation: protein coupling techniques for the biomedical
    sciences 1998, P364 HCAPLUS
(7) Fleminger, G; Appl Biochem Biotechnol 1990, V23, P123 HCAPLUS
(8) Hermanson, G; Bioconjugate techniques 1996, P121
(9) Jeanson, A; J Immunol Methods 1988, V111, P261 HCAPLUS
(10) Keren, Z; Anal Biochem 1986, V155, P182 HCAPLUS
(11) Nakane, P; J Histochem Cytochem 1974, V22, P1084 HCAPLUS
(12) Ornstein, L; J Histochem Cytochem 1966, V14, P790
(13) O'Shannessy, D; Anal Biochem 1990, V191, P1 HCAPLUS
(14) Satoh, A; Anal Biochem 1998, V260, P96 HCAPLUS
(15) Schalkwijk, J; J Clin Invest 1985, V76, P198 HCAPLUS
(16) Shrivastav, T; Clin Chem 1988, V34, P2205 HCAPLUS
     50-23-7, Cortisol
     RL: ANT (Analyte); BSU (Biological study, unclassified); ANST (Analytical
```

study); BIOL (Biological study)

(preparation of horseradish peroxidase conjugate through adipic acid dihydrazide as linker and its use in immunoassays)

RN 50-23-7 HCAPLUS

CN Pregn-4-ene-3,20-dione, 11,17,21-trihydroxy-, (11 $\beta$ )- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT 2203-97-6, Cortisol-21-hemisuccinate

RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of horseradish peroxidase conjugate through adipic acid dihydrazide as linker and its use in immunoassays)

RN 2203-97-6 HCAPLUS

CN Pregn-4-ene-3,20-dione, 21-(3-carboxy-1-oxopropoxy)-11,17-dihydroxy-,  $(11\beta)$ - (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

L46 ANSWER 16 OF 65 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2003:518596 HCAPLUS

DN 139:224924

ED Entered STN: 08 Jul 2003

TI GM-CSF restores innate but not adaptive immune responses in glucocorticoid-immunosuppressed human blood in-vitro

AU Xu, Jian; Lucas, Rudolf; Schuchmann, Marcus; Kuehnle, Simone; Meergans, Thomas; Barreiros, Ana P.; Lohse, Ansgar W.; Otto, Gerd; Wendel, Albrecht

CS Biochemical Pharmacology, University of Konstanz, Mainz, 78457, Germany

SO Journal of Immunology (2003), 171(2), 938-947

CODEN: JOIMA3; ISSN: 0022-1767

PB American Association of Immunologists

- DT Journal
- LA English
- CC 2-10 (Mammalian Hormones)
  - Section cross-reference(s): 15
- Infection remains the major complication of immunosuppressive therapy in AB organ transplantation. Therefore, reconstitution of the innate immunity against infections, without activation of the adaptive immune responses, to prevent graft rejection is a clin. desirable status in transplant recipients. The authors found that GM-CSF restored TNF mRNA and protein expression without inducing IL-2 production and T cell proliferation in glucocorticoid-immunosuppressed blood from either healthy donors or liver transplant patients. Gene array expts. indicated that GM-CSF selectively restored a variety of dexamethasone-suppressed, LPS-inducible genes relevant for innate immunity. A possible explanation for the lack of GM-CSF to restore T cell proliferation is its enhancement of the release of IL-1 $\beta$ R antagonist, rather than of IL-1 $\beta$  itself, since exogenously added  $\text{IL-}1\beta$  induced an IL-2-independent Con A-stimulated proliferation of glucocorticoid-immunosuppressed lymphocytes. Finally, to test the in vivo relevance of the authors' findings, the authors showed that GM-CSF restored the survival of dexamethasone- or cyclosporine A-immunosuppressed mice from an otherwise lethal infection with Salmonella typhimurium. In addition to this increased resistance to infection, GM-CSF did not induce graft rejection of a skin allotransplant in cyclosporine A-immunosuppressed mice. The selective restoration potential of GM-CSF suggests its therapeutic use in improving the resistance against infections upon organ transplantation.
- ST GMCSF immunity glucocorticoid immunosuppression TNF blood transplant
- IT Chemokines
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (C-X-C, GCP-2 (granulocyte chemotactic protein 2); GM-CSF restores innate but not adaptive immune responses in glucocorticoid-immunosuppressed human blood in-vitro in relation to microarray gene expression profile)
- IT Transcription factors
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (C/EBP (CCAAT box/enhancer element-binding protein), subunit B; GM-CSF restores innate but not adaptive immune responses in glucocorticoid-immunosuppressed human blood in-vitro in relation to microarray gene expression profile)
- IT CD antigens
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (CD27, T-cell activation; GM-CSF restores innate but not adaptive immune responses in glucocorticoid-immunosuppressed human blood in-vitro in relation to microarray gene expression profile)
- IT Cyclins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (D2; GM-CSF restores innate but not adaptive immune responses in glucocorticoid-immunosuppressed human blood in-vitro in relation to microarray gene expression profile)
- IT Transcription factors
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (ETR101; GM-CSF restores innate but not adaptive immune responses in glucocorticoid-immunosuppressed human blood in-vitro in relation to microarray gene expression profile)
- IT Transcription factors
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (Egr-1; GM-CSF restores innate but not adaptive immune responses in glucocorticoid-immunosuppressed human blood in-vitro in relation to microarray gene expression profile)

Cordero-Garcia PCT/US03/26233 ΙT Transcription factors RL: BSU (Biological study, unclassified); BIOL (Biological study) (GATA-2; GM-CSF restores innate but not adaptive immune responses in glucocorticoid-immunosuppressed human blood in-vitro in relation to microarray gene expression profile) Transcription factors ΙT RL: BSU (Biological study, unclassified); BIOL (Biological study) (GATA-3; GM-CSF restores innate but not adaptive immune responses in glucocorticoid-immunosuppressed human blood in-vitro in relation to microarray gene expression profile) ΙT DNA microarray technology Gene expression profiles, animal Human Immunosuppression Signal transduction, biological (GM-CSF restores innate but not adaptive immune responses in glucocorticoid-immunosuppressed human blood in-vitro in relation to microarray gene expression profile) ΙT Gene, animal Glucocorticoids Lipopolysaccharides Platelet-activating factor receptors Proliferating cell nuclear antigen Tumor necrosis factors RL: BSU (Biological study, unclassified); BIOL (Biological study) (GM-CSF restores innate but not adaptive immune responses in glucocorticoid-immunosuppressed human blood in-vitro in relation to microarray gene expression profile) ΙT Heat-shock proteins RL: BSU (Biological study, unclassified); BIOL (Biological study) (HSP 70; GM-CSF restores innate but not adaptive immune responses in glucocorticoid-immunosuppressed human blood in-vitro in relation to microarray gene expression profile) ΙT Heat-shock proteins RL: BSU (Biological study, unclassified); BIOL (Biological study) (HSP 90; GM-CSF restores innate but not adaptive immune responses in glucocorticoid-immunosuppressed human blood in-vitro in relation to microarray gene expression profile) ΙT Cell adhesion molecules RL: BSU (Biological study, unclassified); BIOL (Biological study) (ICAM-1 (intercellular adhesion mol. 1), precursor; GM-CSF restores innate but not adaptive immune responses in glucocorticoidimmunosuppressed human blood in-vitro in relation to microarray gene expression profile) ΙT Proteins RL: BSU (Biological study, unclassified); BIOL (Biological study) (Linker for activation of T cells; GM-CSF restores innate but not adaptive immune responses in glucocorticoid-immunosuppressed human

blood in-vitro in relation to microarray gene expression profile) Transcription factors

ΙT

TΤ

RL: BSU (Biological study, unclassified); BIOL (Biological study)  $(NF-\kappa B)$  (nuclear factor of  $\kappa$  light chain gene enhancer in B-cells), p65- and p100-subunits; GM-CSF restores innate but not adaptive immune responses in glucocorticoid-immunosuppressed human blood in-vitro in relation to microarray gene expression profile)

Antigens RL: BSU (Biological study, unclassified); BIOL (Biological study) (RAP-1 (rhoptry-associated protein 1), RAP-1B; GM-CSF restores innate but

#### Cordero-Garcia PCT/US03/26233

- not adaptive immune responses in glucocorticoid-immunosuppressed human blood in-vitro in relation to microarray gene expression profile)
- IT Rho protein (G protein)
  - RL: BSU (Biological study, unclassified); BIOL (Biological study)
    (RhoA; GM-CSF restores innate but not adaptive immune responses in
    glucocorticoid-immunosuppressed human blood in-vitro in relation to
    microarray gene expression profile)
- IT Cell adhesion molecules
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (SQM1; GM-CSF restores innate but not adaptive immune responses in glucocorticoid-immunosuppressed human blood in-vitro in relation to microarray gene expression profile)
- IT Cell proliferation
  - (T cell; GM-CSF restores innate but not adaptive immune responses in glucocorticoid-immunosuppressed human blood in-vitro in relation to microarray gene expression profile)
- IT Transcription factors
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (TFIID (transcription factor IID), 31-kDa subunit; GM-CSF restores innate but not adaptive immune responses in glucocorticoid-immunosuppressed human blood in-vitro in relation to microarray gene expression profile)
- IT Cytokine receptors
  - RL: BSU (Biological study, unclassified); BIOL (Biological study)
    (WSL protein; GM-CSF restores innate but not adaptive immune responses in glucocorticoid-immunosuppressed human blood in-vitro in relation to microarray gene expression profile)
- IT Transcription factors
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (activated RNA polymerase II transcriptional coactivator p15; GM-CSF restores innate but not adaptive immune responses in glucocorticoid-immunosuppressed human blood in-vitro in relation to microarray gene expression profile)
- IT Transplant and Transplantation
  - (allotransplant, skin; GM-CSF restores innate but not adaptive immune responses in glucocorticoid-immunosuppressed human blood in-vitro in relation to microarray gene expression profile)
- IT Skin
  - (allotransplant; GM-CSF restores innate but not adaptive immune responses in glucocorticoid-immunosuppressed human blood in-vitro in relation to microarray gene expression profile)
- IT Tyrosine kinase receptors
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (ephrin type-A receptor 4, precursor; GM-CSF restores innate but not adaptive immune responses in glucocorticoid-immunosuppressed human blood in-vitro in relation to microarray gene expression profile)
- IT Proteins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (eukaryotic initiation factor-2-associated, p67, Methionine aminopeptidase 2; GM-CSF restores innate but not adaptive immune responses in glucocorticoid-immunosuppressed human blood in-vitro in relation to microarray gene expression profile)
- IT Transcription factors
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (growth arrest and DNA damage-inducible gene protein; GM-CSF restores innate but not adaptive immune responses in glucocorticoid-immunosuppressed human blood in-vitro in relation to microarray gene expression profile)
- IT Immunity

(innate; GM-CSF restores innate but not adaptive immune responses in glucocorticoid-immunosuppressed human blood in-vitro in relation to microarray gene expression profile)

IT Interleukin 1 receptors

RL: BSU (Biological study, unclassified); BIOL (Biological study) (interleukin  $1\beta$ ; GM-CSF restores innate but not adaptive immune responses in glucocorticoid-immunosuppressed human blood in-vitro in relation to microarray gene expression profile)

IT Transplant and Transplantation

(liver; GM-CSF restores innate but not adaptive immune responses in glucocorticoid-immunosuppressed human blood in-vitro in relation to microarray gene expression profile)

IT Transcription factors

RL: BSU (Biological study, unclassified); BIOL (Biological study) (metal-regulatory transcription factor; GM-CSF restores innate but not adaptive immune responses in glucocorticoid-immunosuppressed human blood in-vitro in relation to microarray gene expression profile)

IT Cyclin dependent kinase inhibitors

RL: BSU (Biological study, unclassified); BIOL (Biological study) (p27KIP1; GM-CSF restores innate but not adaptive immune responses in glucocorticoid-immunosuppressed human blood in-vitro in relation to microarray gene expression profile)

IT Interleukin  $1\beta$ 

Interleukin 6

Interleukin 8

Macrophage inflammatory protein  $1\alpha$  Macrophage inflammatory protein  $1\beta$ 

RANTES (chemokine)

RL: BSU (Biological study, unclassified); BIOL (Biological study) (precursor; GM-CSF restores innate but not adaptive immune responses in glucocorticoid-immunosuppressed human blood in-vitro in relation to microarray gene expression profile)

IT T cell (lymphocyte)

(proliferation; GM-CSF restores innate but not adaptive immune responses in glucocorticoid-immunosuppressed human blood in-vitro in relation to microarray gene expression profile)

IT Liver

(transplant; GM-CSF restores innate but not adaptive immune responses in glucocorticoid-immunosuppressed human blood in-vitro in relation to microarray gene expression profile)

IT Corticotropin releasing factor receptors

RL: BSU (Biological study, unclassified); BIOL (Biological study) (type I, precursor; GM-CSF restores innate but not adaptive immune responses in glucocorticoid-immunosuppressed human blood in-vitro in relation to microarray gene expression profile)

IT Enzymes, biological studies

RL: BSU (Biological study, unclassified); BIOL (Biological study) (ubiquitin-conjugating, 17-kDa; GM-CSF restores innate but not adaptive immune responses in glucocorticoid-immunosuppressed human blood in-vitro in relation to microarray gene expression profile)

IT Proteins

RL: BSU (Biological study, unclassified); BIOL (Biological study) (zinc finger-containing, 91; GM-CSF restores innate but not adaptive immune responses in glucocorticoid-immunosuppressed human blood in-vitro in relation to microarray gene expression profile)

IT Interleukin 7 receptors

RL: BSU (Biological study, unclassified); BIOL (Biological study) ( $\alpha$ -subunit precursor; GM-CSF restores innate but not adaptive

- immune responses in glucocorticoid-immunosuppressed human blood in-vitro in relation to microarray gene expression profile)
- IT Macrophage inflammatory protein 2
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) ( $\alpha$ ; GM-CSF restores innate but not adaptive immune responses in glucocorticoid-immunosuppressed human blood in-vitro in relation to microarray gene expression profile)
- IT Fibronectin receptors
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (β subunit; CD29 Ag; GM-CSF restores innate but not adaptive immune responses in glucocorticoid-immunosuppressed human blood in-vitro in relation to microarray gene expression profile)
- IT Integrins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) ( $\beta$ 1; GM-CSF restores innate but not adaptive immune responses in glucocorticoid-immunosuppressed human blood in-vitro in relation to microarray gene expression profile)
- TT 50-02-2, Dexamethasone 59865-13-3, Cyclosporine A 78990-62-2, Calpain 81627-83-0, MCSF 141349-86-2, CDk2 kinase 165245-96-5, p38 Kinase 289899-93-0, c-Jun N-terminal kinase 2
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (GM-CSF restores innate but not adaptive immune responses in glucocorticoid-immunosuppressed human blood in-vitro in relation to microarray gene expression profile)
- IT 83869-56-1, Granulocyte macrophage colony-stimulating factor RL: BSU (Biological study, unclassified); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (GM-CSF restores innate but not adaptive immune responses in glucocorticoid-immunosuppressed human blood in-vitro in relation to microarray gene expression profile)
- IT 142008-29-5, CAMP-dependent protein kinase
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (I,  $\alpha$  regulatory subunit; GM-CSF restores innate but not adaptive immune responses in glucocorticoid-immunosuppressed human blood in-vitro in relation to microarray gene expression profile)
- IT 9001-92-7, Protease
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (calcium-dependent; GM-CSF restores innate but not adaptive immune responses in glucocorticoid-immunosuppressed human blood in-vitro in relation to microarray gene expression profile)
- IT 140879-24-9, Proteasome
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (component C2, C3, C5 and C8; GM-CSF restores innate but not adaptive immune responses in glucocorticoid-immunosuppressed human blood in-vitro in relation to microarray gene expression profile)
- IT 161384-17-4, MMP-14 182762-08-9, Caspase-4
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (precursor; GM-CSF restores innate but not adaptive immune responses in glucocorticoid-immunosuppressed human blood in-vitro in relation to microarray gene expression profile)
- RE.CNT 66 THERE ARE 66 CITED REFERENCES AVAILABLE FOR THIS RECORD RE
- (1) Ashwell, J; Annu Rev Immunol 2000, V18, P309 HCAPLUS
- (2) Azzoni, L; J Immunol 2002, V168, P5764 HCAPLUS
- (3) Baiocchi, R; J Clin Invest 2001, V108, P887 HCAPLUS
- (4) Baldwin, W; Immunity 2001, V14, P369 HCAPLUS
- (5) Bendall, L; Leukemia 1995, V9, P677 MEDLINE
- (6) Benedict, C; Immunity 2001, V15, P617 HCAPLUS
- (7) Bingaman, A; J Immunol 2000, V164, P3065 HCAPLUS

- (8) Black, R; Nature 1997, V385, P729 HCAPLUS
- (9) Boneberg, E; Blood 2000, V95, P270 HCAPLUS
- (10) Briggs, W; Cytokine 1996, V8, P804 HCAPLUS(11) Brummer, E; J Leukocyte Biol 2001, V70, P868 HCAPLUS
- (12) Bundschuh, D; J Immunol 1997, V158, P2862 HCAPLUS
- (13) Christopher, K; J Immunol 2002, V169, P522 HCAPLUS
- (14) Clurman, B; Proc Natl Acad Sci USA 1998, V95, P15158 HCAPLUS
- (15) Conti, F; Am J Pathol 2000, V157, P1685 HCAPLUS
- (16) Dobashi, Y; Am J Pathol 1998, V153, P963 HCAPLUS

- (17) Farag, S; Blood 2002, V100, P1935 HCAPLUS (18) Ferguson, T; Nat Med 1999, V5, P1231 HCAPLUS (19) Fierer, J; J Immunol 2002, V168, P6396 HCAPLUS
- (20) Fishman, J; N Engl J Med 1998, V338, P1741 MEDLINE (21) Flohe, S; Shock 1999, V12, P17 MEDLINE
- (22) Flynn, J; Immunity 1995, V2, P561 HCAPLUS
- (23) Freeman, R; Transplantation 1999, V67, P1005
- (24) Guha, M; Cell Signaling 2001, V13, P85 HCAPLUS
- (25) Guillou, P; Transplantation 1982, V33, P414 MEDLINE
- (26) Harrop, J; J Immunol 1998, V161, P1786 HCAPLUS (27) Hartung, T; Cytokine 2000, V12, P1570 HCAPLUS

- (28) He, H; Transplantation 2002, V73, P853 (29) Heinrich, J; J Immunol 2001, V167, P1624 HCAPLUS (30) Hennemann, B; Br J Haematol 1998, V102, P1197 HCAPLUS
- (31) Hirata, M; Transplant Int 1998, V11(Suppl 1), PS185
- (32) Jaeger, K; Intensive Care Med 1999, V25, P612 MEDLINE
- (33) Jones, T; Med Oncol 1996, V13, P141 MEDLINE
- (34) Jonsson, J; Liver Transplant 2001, V7, P255 MEDLINE (35) Kahan, B; N Engl J Med 1989, V321, P1725 HCAPLUS (36) Keane, J; N Engl J Med 2001, V345, P1098 HCAPLUS

- (37) Kim, K; Cancer Lett 2001, V166, P33 HCAPLUS (38) Li, Y; Nat Med 1999, V5, P1298 HCAPLUS
- (39) Lucas, R; Blood 1998, V92, P4730 HCAPLUS
- (40) Maier, S; Nat Med 2001, V7, P557 HCAPLUS
  (41) Medzhitov, R; N Engl J Med 2000, V343, P338 HCAPLUS

- (42) Metcalf, D; Blood 1986, V67, P257 HCAPLUS
  (43) Muench, M; Exp Hematol 2000, V28, P961 HCAPLUS
  (44) Navarro, F; Transplantation 2000, V69, P633 MEDLINE
  (45) Oertel, M; Transplantation 2001, V72, P116 MEDLINE
- (46) Patel, R; Clin Microbiol Rev 1997, V10, P86 HCAPLUS
- (47) Plant, J; Infect Immun 1983, V42, P71 HCAPLUS
- (48) Polyak, K; Cell 1994, V78, P59 HCAPLUS (49) Randow, F; J Immunol 1997, V158, P2911 HCAPLUS
- (50) Rossini, A; Physiol Rev 1999, V79, P99 HCAPLUS(51) Rottenberg, M; J Immunol 1999, V162, P2829 HCAPLUS
- (52) Sahoo, S; Transplantation 2000, V69, P880 HCAPLUS
- (53) Sayegh, M; N Engl J Med 1998, V338, P1813 HCAPLUS
- (54) Schmidt, M; J Immunol 2001, V166, P1344 HCAPLUS
- (55) Shibuya, A; Blood 1991, V78, P3241 MEDLINE
- (56) Smets, L; Adv Exp Med Biol 1999, V457, P607 HCAPLUS
- (57) Souto, J; Am J Pathol 2000, V156, P1811 HCAPLUS

- (58) Sung, R; Mol Ther 2001, V3, P757 HCAPLUS (59) Taguchi, K; Blood 1992, V79, P3227 HCAPLUS (60) Tiegs, G; J Clin Invest 1994, V93, P2616 HCAPLUS
- (61) Tite, J; J Immunol 1991, V147, P3161 HCAPLUS
- (62) Trindade, E; J Hepatol 1998, V28, P1054 HCAPLUS
- (63) Venema, H; J Med Virol 1994, V42, P188 MEDLINE (64) Wells, A; Nat Med 1999, V5, P1303 HCAPLUS
- (65) Williams, M; J Infect Dis 1998, V177, P107 HCAPLUS
- (66) Williams, M; J Infect Dis 1998, V178, P1421 HCAPLUS

IT 50-02-2, Dexamethasone

RL: BSU (Biological study, unclassified); BIOL (Biological study) (GM-CSF restores innate but not adaptive immune responses in glucocorticoid-immunosuppressed human blood in-vitro in relation to microarray gene expression profile)

RN 50-02-2 HCAPLUS

CN Pregna-1,4-diene-3,20-dione, 9-fluoro-11,17,21-trihydroxy-16-methyl-,  $(11\beta,16\alpha)$ - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L46 ANSWER 17 OF 65 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2003:445469 HCAPLUS

DN 139:302222

ED Entered STN: 11 Jun 2003

TI Membrane-initiated steroid signaling (MISS): genomic steroid action starts at the plasma membrane

AU Daufeldt, Sabine; Lanz, Rainer; Allera, Axel

CS Department of Clinical Biochemistry, University of Bonn, Bonn, 53105, Germany

SO Journal of Steroid Biochemistry and Molecular Biology (2003), 85(1), 9-23 CODEN: JSBBEZ; ISSN: 0960-0760

PB : Elsevier Science Ltd.

DT Journal

LA English

CC 2-4 (Mammalian Hormones)

Section cross-reference(s): 6

Plasma membrane (PM) steroid recognition sites are thought to be AΒ responsible only for rapid, non-genomic responses without any link to the nuclear receptor-mediated genomic effects of steroids. We focused on a PM "glucocorticoid-importer" (GC-importer) that imports GC into rat liver cells. This site interacts also with particular gestagens (progesterone, P; medroxyprogesterone, MP; ethynodiol, Ethy) and estrogens (ethinylestradiol, EE2; mestranol), which do not bind to the nuclear GC receptor (GR). To elucidate the role of the GC-importer, we transfected a rat wild-type hepatocyte (CC-1) and a hepatoma cell line, unable to import GC (MH 3924), with a GC $\leftrightarrow$ GR-responsive luciferase (luc)-reporter gene. Selected steroids were tested for their ability to induce or inhibit luc expression. Corticosterone (B) and dexamethasone (Dex), but also the GC-antagonists cortexolone (Cortex), P and MP, induced luc. Even the PM-impermeable BSA-derivs. of B, Dex and Cortex did so to almost the same extent as the free steroids. MH 3924 cells respond stronger than CC-1 to luc inducing steroids. Luc expression was inhibited by RU 38 486, but also by EE2 and Ethy. The thiol reactive mesylate-derivs. of B, Dex and Cortex induced to a considerably lesser extent than the free or

BSA-steroids. The thiol reagent mersalyl blocks cellular entry of GC and inhibits luc induction in CC-1 cells. Incubation with EE2 and B of PM-vesicles, isolated from liver cells, resulted in a decrease of the d. of two 75 and 52 kDa G-proteins reflecting a diminished exchange of GDP by GTP. Conclusion: the PM-residing GC-importer, now renamed "Steroid Hormone Recognition and Effector Complex" (SHREC) is an interdependent part of the complete GC signal propagation in which G-proteins are involved. Free SH-groups of SHREC are a prerequisite for genomic GC activity. Specific interactions between SHREC and GC-agonist/-antagonist trigger steroid-dependent signaling. However, import of the ligand into the cell terminates it. Thus, the PM-related non-genomic steroid responses are clearly linked to the GR-related genomic effects.

- ST steroid signaling genomic nongenomic plasma membrane nucleus SHREC glucocorticoids
- IT Albumins, biological studies

RL: BSU (Biological study, unclassified); BIOL (Biological study) (-conjugated glucocorticoids; genomic vs. non-genomic steroid signaling via the SHREC transport protein and possible interaction with the glucocorticoid receptor)

IT Cell membrane

Signal transduction, biological

(genomic vs. non-genomic steroid signaling via the SHREC transport protein and possible interaction with the glucocorticoid receptor)

IT Glucocorticoids

Nuclear receptors

Steroids, biological studies

RL: BSU (Biological study, unclassified); BIOL (Biological study) (genomic vs. non-genomic steroid signaling via the SHREC transport protein and possible interaction with the glucocorticoid receptor)

IT Liver

(hepatocyte; genomic vs. non-genomic steroid signaling via the SHREC transport protein and possible interaction with the glucocorticoid receptor)

IT Liver, neoplasm

(hepatoma; genomic vs. non-genomic steroid signaling via the SHREC transport protein and possible interaction with the glucocorticoid receptor)

IT G proteins (guanine nucleotide-binding proteins)

RL: BSU (Biological study, unclassified); BIOL (Biological study) (of 75 and 52 kDa, involvement in non-genomic steroid signaling; genomic vs. non-genomic steroid signaling via the SHREC transport protein and possible interaction with the glucocorticoid receptor)

IT Transport proteins

RL: BSU (Biological study, unclassified); BIOL (Biological study) (steroid transporter, SHREC (steroid hormone recognition and effector complex); genomic vs. non-genomic steroid signaling via the SHREC transport protein and possible interaction with the glucocorticoid receptor)

IT 50-02-2, Dexamethasone 50-02-2D, Dexamethasone, BSA- or mersalyl-conjugated 50-22-6, Corticosterone 50-22-6D, Corticosterone, BSA- or mersalyl-57-63-6, Ethinylestradiol tudies 72-33-3, Mestranol 57-83-0, Progesterone, conjugated 152-58-9, Cortexolone biological studies 152-58-9D, Cortexolone, BSA- or mersalyl-conjugated 492-18-2D, Mersalyl, BSA- or mersalyl-conjugated 520-85-4, 84371-65-3, RU 38486 Medroxyprogesterone 1231-93-2, Ethynodiol RL: BSU (Biological study, unclassified); BIOL (Biological study)

**新江江湖** 

#### Cordero-Garcia PCT/US03/26233

(genomic vs. non-genomic steroid signaling via the SHREC transport protein and possible interaction with the glucocorticoid receptor) RE.CNT 48 THERE ARE 48 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Ali, N; Mol Cell Biochem 1989, V91, P75 HCAPLUS
- (2) Allera, A; 2. Nebennierenkonferez, 1991 1993, P1
- (3) Allera, A; Clin Endocrinol, in press 2003
- (4) Allera, A; J Steroid Biochem Mol Biol 1992, V42, P737 HCAPLUS(5) Allera, A; J Steroid Biochem Mol Biol 1992, V42, P757 HCAPLUS
- (6) Allera, A; Proceedings of the 69th Annual Meeting of The Endocrine Society 1987, abstract no 752
- (7) Borski, R; Trends Endocrinol Metab 2000, V11, P427 HCAPLUS
- (8) Burger, K; FEBS Lett 1999, V464, P25 HCAPLUS(9) Cadrin, M; J Cell Biochem 1996, V62, P334 HCAPLUS
- (10) Chambliss, K; Endocrinol Rev 2002, V23, P665 HCAPLUS
- (11) Daufeldt, S; Inaugural-Dissertation zur Erlangung des Doktorgrades der Math-Naturwissenschaftl, Fakultat der Friedrich-Wilhelms-Universitat Bonn 2000
- (12) Falkenstein, E; Eur J Clin Invest 2000, V30(Suppl 3), P51
- (13) Filardo, E; J Steroid Biochem Mol Biol 2002, V80, P231 HCAPLUS
- (14) Grotjan, H; Comput Biol Med 1977, V7, P159 MEDLINE (15) Harrigan, M; Mol Endocrinol 1991, V5, P1331 HCAPLUS
- (16) Hendry, L; J Steroid Biochem Mol Biol 1995, V55, P173 HCAPLUS
- (17) Iwasaki, Y; Biochem Biophys Res Commun 1997, V235, P295 HCAPLUS
- (18) Jasper, J; Am J Physiol 1998, V275, PC634 HCAPLUS
- (19) Kilic, G; J Biol Chem 2002, V277, P11721 HCAPLUS
- (20) Knoke, I; Hum Genet 1999, V104, P257 HCAPLUS
- (21) Kuboshima, S; Adv Perit Dial 2001, V17, P47 MEDLINE
- (22) Lackner, C; J Steroid Biochem Mol Biol 1998, V64, P69 HCAPLUS
- (23) Lackner, C; Proceedings of the First International Meeting on Rapid Responses to Steroid Hormones 1998, abstract no 6004
- (24) Lanz, R; Cell 1999, V97, P17 HCAPLUS
- (25) Le Mellay, V; J Cell Biol 2000, V79, P173 HCAPLUS
- (26) Levin, E; Steroids 2002, V67, P471 HCAPLUS
- (27) Lin, S; Nat Cell Biol 2001, V3, P802 HCAPLUS (28) Lynch, C; FEBS Lett 1986, V200, P333 HCAPLUS
- (29) Mangelsdorf, D; Cell 1995, V83, P835 HCAPLUS
- (30) McKenna, N; Endocrinol Rev 1999, V20, P321 HCAPLUS
  (31) Nishimura, T; Cell Struct Funct 2000, V25, P161 HCAPLUS
- (32) Orchinik, M; Proc Natl Acad Sci USA 1992, V89, P3830 HCAPLUS
- (33) Pietras, R; Endocrine 2001, V14, P417 HCAPLUS (34) Razandi, M; Mol Endocrinol 1999, V13, P307 HCAPLUS
- (35) Russ, M; Eur J Biochem 1994, V219, P325 HCAPLUS
- (36) Scott, L; Proc Natl Acad Sci USA 2002, V99, P1661 HCAPLUS (37) Simons, S; J Org Chem 1980, V45, P3084 HCAPLUS
- (38) Simons, S; Proc Natl Acad Sci USA 1981, V78, P3541 HCAPLUS
- (39) Spindler, K; J Steroid Biochem Mol Biol 1991, V39, P315 HCAPLUS
- (40) Stevis, P; Endocrinology 1999, V140, P5455 HCAPLUS (41) Sutter-Dub, M; Steroids 2002, V67, P77 HCAPLUS
- (42) Svoboda, P; Cell Mol Life Sci 2002, V59, P501 HCAPLUS
- (43) Teruel, M; Science 2002, V295, P1910 HCAPLUS
- (44) van Iwaarden, P; Biochim Biophys Acta 1992, V1113, P161 HCAPLUS
- (45) van den Berg, J; J Steroid Biochem Mol Biol 1996, V57, P239 HCAPLUS
- (46) Verrey, F; Am J Physiol 1999, V277, PF319 HCAPLUS
- (47) Watson, C; Int Immunopharmacol 2001, V1, P1049 HCAPLUS
- (48) Watson, C; Proc Soc Exp Biol Med 1999, V220, P9 HCAPLUS
- 50-02-2, Dexamethasone 50-02-2D, Dexamethasone, BSA- or mersalyl-conjugated 50-22-6, Corticosterone 50-22-6D, Corticosterone, BSA- or mersalyl-

#### conjugated

RL: BSU (Biological study, unclassified); BIOL (Biological study) (genomic vs. non-genomic steroid signaling via the SHREC transport protein and possible interaction with the glucocorticoid receptor)

RN 50-02-2 HCAPLUS

CN Pregna-1,4-diene-3,20-dione, 9-fluoro-11,17,21-trihydroxy-16-methyl-,  $(11\beta,16\alpha)$ - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 50-02-2 HCAPLUS

CN Pregna-1,4-diene-3,20-dione, 9-fluoro-11,17,21-trihydroxy-16-methyl-,  $(11\beta,16\alpha)$ - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

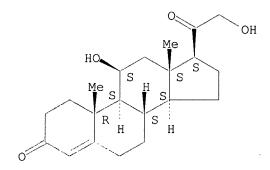
RN 50-22-6 HCAPLUS

CN Pregn-4-ene-3,20-dione, 11,21-dihydroxy-, (11 $\beta$ )- (9CI) (CA INDEX NAME)

RN 50-22-6 HCAPLUS

CN Pregn-4-ene-3,20-dione, 11,21-dihydroxy-, (11 $\beta$ )- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L46 ANSWER 18 OF 65 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2003:230539 HCAPLUS

DN 138:379507

ED Entered STN: 25 Mar 2003

TI Ubiquitin-proteasome-dependent muscle proteolysis responds slowly to insulin release and refeeding in starved rats

AU Kee, Anthony J.; Combaret, Lydie; Tilignac, Thomas; Souweine, Bertrand; Aurousseau, Eveline; Dalle, Michel; Taillandier, Daniel; Attaix, Didier

CS Muscle Development Unit, Children's Medical Research Institute, Wentworthville, NSW 2145, Australia

SO Journal of Physiology (Cambridge, United Kingdom) (2003), 546(3), 765-776 CODEN: JPHYA7; ISSN: 0022-3751

PB Cambridge University Press

DT Journal

LA English

CC 2-6 (Mammalian Hormones)
 Section cross-reference(s): 18

AB The central role of the ubiquitin-proteasome system in the loss of skeletal muscle protein in many wasting conditions has been well established. However, it is unclear what factors are responsible for the suppression of this system during periods of protein gain. Thus, the aim of these studies was to examine the short-term effects of insulin release and nutrients on skeletal muscle protein turnover in young rats starved

for 48 h, and then infused i.v. with amino acids (AA), or fed an oral diet. Forty-eight hours of starvation (i.e., prolonged starvation in

young rats) decreased muscle protein synthesis and increased proteasome-dependent proteolysis. Four-hour AA infusion and 4 h of refeeding increased plasma insulin release and AA concns., and stimulated muscle protein synthesis, but had no effect on either total or proteasome-dependent proteolysis, despite decreased plasma corticosterone concns. Both muscle proteasome-dependent proteolysis and the rate of ubiquitination of muscle proteins were not suppressed until 10 h of The temporal response of these two measurements correlated refeeding. with the normalized expression of the 14-kDa E2 (a critical enzyme in substrate ubiquitination in muscle) and the expression of the MSS1 subunit of the 19S regulatory complex of the 26S proteasome. In contrast, the starvation-induced increase in mRNA levels for 20S proteasome subunits was normalized by refeeding within 24 h in muscle, and 6 h in jejunum, resp. In conclusion, unlike protein synthesis, skeletal muscle proteasome-dependent proteolysis is not acutely responsive in vivo to insulin, AA, and/or nutrient intake in refed starved rats. This suggests that distinct and perhaps independent mechanisms are responsible for the nutrient-dependent regulation of protein synthesis and ubiquitin-proteasome-dependent proteolysis following a prolonged period of catabolism. Furthermore, factors other than the expression of ubiquitin-proteasome pathway components appear to be responsible for the suppression of skeletal muscle proteasome-dependent proteolysis by nutrition.

- ST insulin ubiquitin proteasome muscle proteolysis nutrition rat
- IT Amino acids, biological studies
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (branched; ubiquitin-proteasome dependent muscle proteolysis responds slowly to insulin release and refeeding in starved rats)
- IT Intestine
  - (jejunum; ubiquitin-proteasome dependent muscle proteolysis responds slowly to insulin release and refeeding in starved rats)
- IT Proteins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (skeletal muscle-; ubiquitin-proteasome dependent muscle proteolysis responds slowly to insulin release and refeeding in starved rats)
- IT Enzymes, biological studies
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (ubiquitin-conjugating; ubiquitin-proteasome dependent muscle proteolysis responds slowly to insulin release and refeeding in starved rats)
- IT Nutrition, animal
  Protein degradation
  Starvation, animal
  Translation, genetic
  - (ubiquitin-proteasome dependent muscle proteolysis responds slowly to insulin release and refeeding in starved rats)
- IT 140879-24-9D, 26S Proteasome, 26S
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (MSS1 subunit of 19S regulatory complex of-; ubiquitin-proteasome dependent muscle proteolysis responds slowly to insulin release and refeeding in starved rats)
- TT 50-22-6, Corticosterone 56-40-6, Glycine, biological studies 56-41-7, L-Alanine, biological studies 56-45-1, L-Serine, biological studies 56-85-9, L-Glutamine, biological studies 56-86-0, L-Glutamic acid, biological studies 56-87-1, L-Lysine, biological studies 60-18-4, L-Tyrosine, biological studies 61-90-5, L-Leucine, biological studies 63-68-3, L-Methionine, biological studies 63-91-2, L-Phenylalanine, biological studies 70-26-8, Ornithine 70-47-3, L-Asparagine, biological studies 71-00-1, L-Histidine, biological

ΙT

```
72-18-4, L-Valine, biological studies
                                                      72-19-5, L-Threonine,
     biological studies 73-22-3, L-Tryptophan, biological studies 73-32-5,
     L-Isoleucine, biological studies 74-79-3, L-Arginine, biological studies
     107-35-7, Taurine 147-85-3, L-Proline, biological studies 372-75-8,
                 9004-10-8, Insulin, biological studies
     Citrulline
                                                            140879-24-9D,
     Proteasome, 20S
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (ubiquitin-proteasome dependent muscle proteolysis responds slowly to
        insulin release and refeeding in starved rats)
     60267-61-0, Ubiquitin
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (ubiquitination; ubiquitin-proteasome dependent muscle proteolysis
        responds slowly to insulin release and refeeding in starved rats)
              THERE ARE 63 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE.CNT
        63
(1) Adegoke, O; J Nutr 1999, V129, P1871 HCAPLUS
(2) Attaix, D; Adv Mol Cell Biol 1998, V27, P235 HCAPLUS
(3) Attaix, D; Curr Opin Clin Nutr Metab Care 2001, V4, P45 HCAPLUS
(4) Bailey, J; J Clin Invest 1996, V97, P1447 HCAPLUS
(5) Bennet, W; Eur J Clin Invest 1990, V20, P41 HCAPLUS
(6) Biolo, G; J Clin Invest 1995, V95, P811 HCAPLUS
(7) Castano, J; Biochemistry 1996, V35, P3782 HCAPLUS
(8) Chomczynski, P; Anal Biochem 1987, V162, P156 HCAPLUS
(9) Combaret, L; Am J Kidney Dis 2001, V37(suppl 2), P108S
(10) Combaret, L; Biochem J 2002, V361, P185 HCAPLUS
(11) Dardevet, D; Endocrinology 1996, V137, P4087 HCAPLUS
(12) Fang, C; Clin Sci 1998, V95, P225 HCAPLUS
(13) Garlick, P; J Nutr 1998, V128, P356S HCAPLUS
(14) Gelfand, R; J Clin Invest 1987, V80, P1 HCAPLUS
(15) Goebl, M; Mol Cell Biol 1994, V14, P3022 HCAPLUS
(16) Gomes, M; Proc Natl Acad Sci U S A 2001, V98, P14440 HCAPLUS
(17) Huang, J; Proc Natl Acad Sci U S A 1998, V95, P12100 HCAPLUS
(18) Kohler, A; Mol Cell 2001, V7, P1143 HCAPLUS
(19) Larbaud, D; Am J Physiol 1996, V271, PE505 HCAPLUS
(20) Larbaud, D; Clin Sci 2001, V101, P551 HCAPLUS
(21) Lecker, S; J Clin Invest 1999, V104, P1411 HCAPLUS
(22) Llovera, M; Int J Mol Med 1988, V2, P69
(23) Louard, R; J CIin Invest 1992, V90, P2348 HCAPLUS
(24) Louard, R; J Clin Endocrinol Metab 1994, V79, P278 HCAPLUS
(25) Lowell, B; Metabolism 1986, V35, P1121 HCAPLUS
(26) Mansoor, O; Proc Natl Acad Sci USA 1996, V93, P2714 HCAPLUS
(27) Mason, G; Eur J Biochem 1996, V238, P453 HCAPLUS
(28) Mason, G; FEBS Lett 1998, V430, P269 HCAPLUS
(29) Medina, R; Biochem J 1995, V307, P631 HCAPLUS
(30) Millward, D; Biochem J 1983, V216, P583 HCAPLUS
(31) Mitch, W; N Engl J Med 1996, V335, P1897 HCAPLUS
(32) Mortimore, G; Protein Metabolism in Diabetes Mellitus 1992, P125 HCAPLUS
(33) Navon, A; Mol Cell 2001, V8, P1339 HCAPLUS
(34) Peters, J; Ubiquitin and the Biology of the Cell 1998
(35) Pickart, C; Annu Rev Biochem 2001, V70, P503 HCAPLUS
(36) Pradier, P; Reprod Fertil Dev 1996, V8, P111 HCAPLUS
(37) Price, S; J Clin Invest 1996, V98, P1703 HCAPLUS
(38) Rock, K; Cell 1994, V78, P761 HCAPLUS
(39) Samuels, S; Am J Physiol 1996, V271, PE232 HCAPLUS
(40) Samuels, S; J Nutr 1995, V125, P520 HCAPLUS
(41) Shah, O; Am J Physiol Endocrinol Metab 2000, V279, PE715 HCAPLUS
(42) Sinaud, S; Am J Physiol 1999, V276, PE50 HCAPLUS
```

(43) Smith, P; Anal Biochem 1985, V150, P76 HCAPLUS (44) Snedecor, G; Statistical Methods, 6th edn 1967

- (45) Sokal, R; Biometry 1969
- (46) Solomon, V; Proc Natl Acad Sci USA 1998, V95, P12602 HCAPLUS
- (47) Stephen, A; J Biol Chem 1996, V271, P15608 HCAPLUS
- (48) Tawa, N; J Clin Invest 1997, V100, P197 HCAPLUS
- (49) Temparis, S; Cancer Res 1994, V54, P5568 HCAPLUS
- (50) Tessari, P; J Clin Invest 1991, V88, P27 HCAPLUS
  (51) Tessari, P; J Clin Invest 1996, V98, P1361 HCAPLUS
- (52) Tiao, G; J Clin Invest 1997, V99, P163 HCAPLUS
- (53) Tischler, M; J Biol Chem 1982, V257, P1613 HCAPLUS
- (54) Voges, D; Annu Rev Biochem 1999, V68, P1015 HCAPLUS
- (55) Voisin, L; J Clin Invest 1996, V97, P1610 HCAPLUS
- (56) Waterlow, J; Nutr Res Rev 1999, V12, P25 HCAPLUS
- (57) Waterlow, J; Protein Turnover in Mammalian Tissues and in the Whole Body 1978
- (58) Watt, P; Am J Physiol 1992, V263, PE453 HCAPLUS
- (59) Williams, A; Surgery 1999, V126, P744 MEDLINE
- (60) Wing, S; Am J Physiol 1993, V264, PE668 HCAPLUS
- (61) Wing, S; Am J Physiol 1994, V267, PE39 HCAPLUS
- (62) Wing, S; Biochem J 1995, V307, P639 HCAPLUS
- (63) Wolfe, R; Curr Opin Clin Nutr Metab Care 2000, V3, P67 HCAPLUS
- 50-22-6, Corticosterone TΤ
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (ubiquitin-proteasome dependent muscle proteolysis responds slowly to insulin release and refeeding in starved rats)
- 50-22-6 HCAPLUS RN
- Pregn-4-ene-3,20-dione, 11,21-dihydroxy-,  $(11\beta)$  (9CI) (CA INDEX CNNAME)

- L46 ANSWER 19 OF 65 HCAPLUS COPYRIGHT 2004 ACS on STN
- 2003:154230 HCAPLUS ΑN
- 138:210277 DN
- 28 Feb 2003 Entered STN: ED
- Synthesis and use of reagents for improved DNA lipofection and/or slow TI release prodrug and drug therapies
- Diamond, Scott L.; Gruneich, Jeffrey ΙN
- The Trustees of the University of Pennsylvania, USA PA
- PCT Int. Appl., 70 pp. SO CODEN: PIXXD2
- DTPatent
- English LA
- ICM A61K009-22 IC
  - ICS A01N037-18; A01N043-04; C12N015-87
- CC 63-5 (Pharmaceuticals)

Section cross-reference(s): 1, 2, 15 FAN.CNT 1 PATENT NO. KIND DATE -----------\_\_\_\_ WO 2003015757 PΙ

APPLICATION NO. ------\_\_\_\_\_ A1 20030227 WO 2002-US26152 20020815

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU,

TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

20040609 EP 2002-759383 EP 1424998 A1 AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK

PRAI US 2001-312729P P US 2002-358138P P 20010816 20020220 W WO 2002-US26152 20020815

PATENT NO. CLASS PATENT FAMILY CLASSIFICATION CODES \_\_\_\_\_ \_\_\_\_\_\_\_\_

WO 2003015757 ICM A61K009-22

ICS A01N037-18; A01N043-04; C12N015-87

The invention relates to compns. and methods for a one-step synthetic AΒ technique for making cationic steroid or cationic drug mols. for use as delivery vehicles. The invention further relates to methods for using cationic steroid mols. in lipofection or transfection, delivery of drugs, and for treatment of inflamrnation and other diseases and disorders. The invention also relates to cationic steroid prodrugs and cationic prodrugs and to methods of modifying drugs.

STDNA lipofection cationic steroid drug delivery

ΙT Drug delivery systems

(carriers; synthesis and use of reagents for improved DNA lipofection and/or slow release prodrug and drug therapies)

ΙT

RL: PEP (Physical, engineering or chemical process); PYP (Physical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)

(conjugates; synthesis and use of reagents for improved DNA lipofection and/or slow release prodrug and drug therapies)

IT Metabolism, animal

(disorder; synthesis and use of reagents for improved DNA lipofection and/or slow release prodrug and drug therapies)

ΙT Drug delivery systems

(injections; synthesis and use of reagents for improved DNA lipofection and/or slow release prodrug and drug therapies)

ΤТ RNA

IT

RL: PEP (Physical, engineering or chemical process); PYP (Physical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)

(interfering; synthesis and use of reagents for improved DNA lipofection and/or slow release prodrug and drug therapies) Transformation, genetic

(lipofection; synthesis and use of reagents for improved DNA lipofection and/or slow release prodrug and drug therapies)

```
ΙT
     Drug delivery systems
        (nasal; synthesis and use of reagents for improved DNA lipofection
        and/or slow release prodrug and drug therapies)
ΙT
     Genetic vectors
        (nonviral; synthesis and use of reagents for improved DNA lipofection
        and/or slow release prodrug and drug therapies)
ΙΤ
     Drug delivery systems
        (oral; synthesis and use of reagents for improved DNA lipofection
        and/or slow release prodrug and drug therapies)
ΙT
     Amines, biological studies
     RL: PEP (Physical, engineering or chemical process); PYP (Physical
     process); THU (Therapeutic use); BIOL (Biological study); PROC (Process);
     USES (Uses)
        (polyamines, nonpolymeric; synthesis and use of reagents for improved
        DNA lipofection and/or slow release prodrug and drug therapies)
IT
     Drug delivery systems
        (prodrugs, steroid; synthesis and use of reagents for improved DNA
        lipofection and/or slow release prodrug and drug therapies)
IT
     Drug delivery systems
        (suppositories; synthesis and use of reagents for improved DNA
        lipofection and/or slow release prodrug and drug therapies)
IT
     Diabetes mellitus
     Drug delivery systems
    Erythrocyte
    Gene therapy
     Genetic vectors
     Glycocalyx
     Human
     Infection
     Inflammation
    Mental disorder
     Neoplasm
     PCR (polymerase chain reaction)
     Plasmid vectors
        (synthesis and use of reagents for improved DNA lipofection and/or slow
        release prodrug and drug therapies)
    Antisense oligonucleotides
IT
    Collagens, biological studies
    DNA
    Estrogens
     Fibrins
     Glycosaminoglycans, biological studies
    Nucleic acids
    Oligonucleotides
     Peptide nucleic acids
     Steroids, biological studies
     Tumor necrosis factor receptors
     RL: PEP (Physical, engineering or chemical process); PYP (Physical
     process); THU (Therapeutic use); BIOL (Biological study); PROC (Process);
     USES (Uses)
        (synthesis and use of reagents for improved DNA lipofection and/or slow
        release prodrug and drug therapies)
ΙT
     Drug delivery systems
        (targeted; synthesis and use of reagents for improved DNA lipofection
        and/or slow release prodrug and drug therapies)
TΨ
    Animal tissue
     Organ, animal
        (targeting of; synthesis and use of reagents for improved DNA
        lipofection and/or slow release prodrug and drug therapies)
```

```
ΙT
     Drug delivery systems
        (topical; synthesis and use of reagents for improved DNA lipofection
        and/or slow release prodrug and drug therapies)
ΙT
     Interferons
     RL: PEP (Physical, engineering or chemical process); PYP (Physical
     process); THU (Therapeutic use); BIOL (Biological study); PROC (Process);
     USES (Uses)
        (\alpha-2b); synthesis and use of reagents for improved DNA lipofection
        and/or slow release prodrug and drug therapies)
     67-68-5, Dmso, biological studies
IΤ
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (synthesis and use of reagents for improved DNA lipofection and/or slow
        release prodrug and drug therapies)
     50-02-2D, Dexamethasone, conjugates 56-87-1, Lysine, biological studies 74-79-3D, Arginine, peptides 1115-70-4, Metformin
IT
                     1182-65-6D, Cholesterol tosylate, conjugates
     hydrochloride
     2265-22-7D, conjugates
                              2462-63-7, Dope
                              9002-98-6D, Polyethylenimine,
     6677-96-9D, conjugates
                9004-10-8, Insulin, biological studies 9004-61-9, acid 10540-29-1D, Tamoxifen, conjugates
     peptides
     Hyaluronic acid
                                  20380-16-9D, conjugates
     11096-26-7, Erythropoietin
     20576-45-8D, Deoxycorticosterone-21 mesylate, conjugates
     21829-25-4, Nifedipine 25104-18-1, Polylysine 26787-78-0, Amoxicillin
     26913-06-4D, Polyethylenimine, peptides
                                               33069-62-4, Paclitaxel
     35500-24-4 35500-24-4D, conjugates
     36791-04-5, Ribavirin
                             38000-06-5, Polylysine
                                                       56296-78-7, Fluoxetine
                     59865-13-3, Cyclosporine 60142-96-3, Gabapentin
     hydrochloride
     61177-45-5, Potassium clavulanate 66357-35-5, Ranitidine
                                                                 68047-06-3D,
     4-Hydroxytamoxifen, conjugates 73590-58-6, Omeprazole
                                      74578-69-1, Ceftriaxone sodium
     74381-53-6, Leuprolide acetate
     76095-16-4, Enalapril maleate 76824-35-6, Famotidine
                                                               78246-49-8,
     Paroxetine hydrochloride 79559-97-0, Sertraline hydrochloride
     79794-75-5, Loratadine 79902-63-9, Simvastatin 80474-14-2,
                             81093-37-0, Pravastatin 81103-11-9,
     Fluticasone propionate
                      81131-70-6, Pravastatin sodium 82427-84-7D,
     Clarithromycin
     conjugates 83905-01-5, Azithromycin 83915-83-7, Lisinopril
                 86386-73-4, Fluconazole 93107-08-5, Ciprofloxacin
     dihydrate
                     94749-08-3, Salmeterol xinafoate
                                                       99300-78-4, Venlafaxine
     hydrochloride
                     100986-85-4, Levofloxacin 103577-45-3, Lansoprazole
     hydrochloride
                                          104162-48-3, Dotma 106266-06-2,
     103628-48-4, Sumatriptan succinate
                 111470-99-6, Amlodipine besylate 113427-24-0, Epoetin alfa
     Risperidone
     120202-66-6, Clopidogrel bisulfate 121181-53-1, Filgrastim
     124750-99-8, Losartan potassium 129318-43-0, Alendronate sodium
     132539-06-1, Olanzapine 134523-03-8, Atorvastatin calcium
                                                                   137056-72-5,
               139639-23-9, Tissue plasminogen activator 144189-73-1, Dotap
     Dc-chol
     153439-40-8, Fexofenadine hydrochloride 162011-90-7, Rofecoxib
     168479-03-6, DOSPA 171599-83-0, Sildenafil citrate 679809-58-6,
     Enoxaparin sodium
     RL: PEP (Physical, engineering or chemical process); PYP (Physical
     process); THU (Therapeutic use); BIOL (Biological study); PROC (Process);
     USES (Uses)
        (synthesis and use of reagents for improved DNA lipofection and/or slow
        release prodrug and drug therapies)
ΤТ
               6539-14-6
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (synthesis and use of reagents for improved DNA lipofection and/or slow
        release prodrug and drug therapies)
     499984-17-7P
TΤ
```

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(synthesis and use of reagents for improved DNA lipofection and/or slow release prodrug and drug therapies)

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD RE

- (1) Han; Bioconj Chem 2001, V12, P337 HCAPLUS
- (2) Liotta; US 6153596 2000 HCAPLUS
- (3) Nabel; Proc Nat Acad Sci USA 1993, V90, P11307 HCAPLUS
- (4) Sullivan; US 20010007771 A1 2001
- IT 50-02-2D, Dexamethasone, conjugates 2265-22-7D

, conjugates 6677-96-9D, conjugates

9004-61-9, Hyaluronic acid 35500-24-4

35500-24-4D, conjugates 80474-14-2,

Fluticasone propionate

RL: PEP (Physical, engineering or chemical process); PYP (Physical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)

(synthesis and use of reagents for improved DNA lipofection and/or slow release prodrug and drug therapies)

- RN 50-02-2 HCAPLUS
- CN Pregna-1,4-diene-3,20-dione, 9-fluoro-11,17,21-trihydroxy-16-methyl-,  $(11\beta,16\alpha)$  (9CI) (CA INDEX NAME)

Absolute stereochemistry.

- RN 2265-22-7 HCAPLUS
- CN Pregna-1,4-diene-3,20-dione, 9-fluoro-11,17-dihydroxy-16-methyl-21- [(methylsulfonyl)oxy]-,  $(11\beta,16\alpha)$  (9CI) (CA INDEX NAME)

Absolute stereochemistry.

No.

RN 6677-96-9 HCAPLUS

CN Pregn-4-ene-3,20-dione, 11,17-dihydroxy-21-[(methylsulfonyl)oxy]-, (11 $\beta$ )- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 9004-61-9 HCAPLUS

CN Hyaluronic acid (8CI, 9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

RN 35500-24-4 HCAPLUS

CN Pregn-4-ene-3,20-dione, 11-hydroxy-21-[(methylsulfonyl)oxy]-, (11 $\beta$ )- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 35500-24-4 HCAPLUS

CN Pregn-4-ene-3,20-dione, 11-hydroxy-21-[(methylsulfonyl)oxy]-, (11 $\beta$ )- (9CI) (CA INDEX NAME)

RN 80474-14-2 HCAPLUS

CN Androsta-1,4-diene-17-carbothioic acid, 6,9-difluoro-11-hydroxy-16-methyl-3-oxo-17-(1-oxopropoxy)-, S-(fluoromethyl) ester,  $(6\alpha,11\beta,16\alpha,17\alpha)$ - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

## IT 499984-17-7P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(synthesis and use of reagents for improved DNA lipofection and/or slow release prodrug and drug therapies)

RN 499984-17-7 HCAPLUS

CN Butanimidamide, N-[3-[[4-[(3-aminopropyl)amino]butyl]amino]propyl]-4- [[(11 $\beta$ ,16 $\alpha$ )-9-fluoro-11,17-dihydroxy-16-methyl-3,20-dioxopregna-1,4-dien-21-yl]thio]-, tetrakis(trifluoroacetate) (salt) (9CI) (CA INDEX NAME)

CM 1.

CRN 499984-16-6 CMF C36 H60 F N5 O4 S

PAGE 1-B

CM 2

76-05-1 CRN CMF C2 H F3 O2

ANSWER 20 OF 65 HCAPLUS COPYRIGHT 2004 ACS on STN L46

2002:973325 HCAPLUS ΑN

139:202229 DN

Entered STN: 26 Dec 2002 ED

Synthesis of an enzyme-dependent prodrug and evaluation of its potential TIfor colon targeting

ΑU

Pang, Yi-Nuo; Zhang, Yan; Zhang, Zhi-Rong West China School of Pharmacy, Sichuan University, Chengdu, 610041, Peop. CS Rep. China

World Journal of Gastroenterology (2002), 8(5), 913-917 SO CODEN: WJGAF2; ISSN: 1007-9327

World Journal of Gastroenterology PΒ

DTJournal

English LA

CC 63-5 (Pharmaceuticals)

A dexamethasone-succinate-dextran (DSD) conjugate was AΒ synthesized and evaluated its potential for the treatment of inflammatory bowel diseases. Dexamethasone was attached to dextran (average mol. weight=70 400 Dalton) using succinate anhydride in an anhydrous environment catalyzed by 4-dimethylaminopyridine and 1, 1'-carbonyldiimidazole. chemical structure of DSD was identified by UV, IR and NMR, and the in vivo

Cordero-Garcia PCT/US03/26233 drug release behavior of this prodrug was investigated after oral administration of DSD suspension. The DSD conjugate was obtained in two steps and the content of dexamethasone in DSD was 11.28 %. The dextran prodrug was stable in rat stomach and small intestine and negligibly absorbed from these tracts. Four to nine hours after the oral administration, most of the prodrug (>95 %) had moved to the cecum and colon, and was easily hydrolyzed by an endodextranase. Recover of dexamethasone from colon and cecum after administration of DSD conjugate was 6-12 folds higher than the recovery after administration of unmodified dexamethasone (t=2.74, P<0.05). The preferential release of free dexamethasone in cecum and colon over that in the small intestine was statistically significant (t=2.27, P<0.05). The results of this study indicate that dextran conjugates may be useful in selectively delivering glucocorticoids to the colon. dexamethasone dextran prodrug colon targeting Intestine (cecum; synthesis of an enzyme-dependent prodrug and evaluation of its potential for colon targeting) Intestine (colon; synthesis of an enzyme-dependent prodrug and evaluation of its potential for colon targeting) Hydrolysis (enzymic; synthesis of an enzyme-dependent prodrug and evaluation of its potential for colon targeting) Drug delivery systems (prodrugs; synthesis of an enzyme-dependent prodrug and evaluation of its potential for colon targeting) Drug delivery systems (suspensions; synthesis of an enzyme-dependent prodrug and evaluation of its potential for colon targeting) Anti-inflammatory agents (synthesis of an enzyme-dependent prodrug and evaluation of its potential for colon targeting) 9025-70-1, Endodextranase RL: BSU (Biological study, unclassified); BIOL (Biological study) (synthesis of an enzyme-dependent prodrug and evaluation of its potential for colon targeting) 50-02-2, Dexamethasone RL: PAC (Pharmacological activity); PRP (Properties); RCT (Reactant); THU (Therapeutic use); BIOL (Biological study); RACT (Reactant or reagent);

IΤ

USES (Uses)

(synthesis of an enzyme-dependent prodrug and evaluation of its potential for colon targeting)

156228-67-0P ΤТ

ST TΤ

IT

ΙT

IΤ

ΙT

ΙΤ

ΙT

RL: PAC (Pharmacological activity); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(synthesis of an enzyme-dependent prodrug and evaluation of its potential for colon targeting)

108-30-5, reactions 9004-54-0, Dextran, reactions TΤ

RL: RCT (Reactant); RACT (Reactant or reagent) (synthesis of an enzyme-dependent prodrug and evaluation of its potential for colon targeting)

ΙT 3800-86-0P

> RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(synthesis of an enzyme-dependent prodrug and evaluation of its potential for colon targeting)

THERE ARE 53 CITED REFERENCES AVAILABLE FOR THIS RECORD RE.CNT 53

```
(1) Adkin, D; Pharm Res 1997, V14, P103 HCAPLUS
(2) Brondsted, H; J Control Rel 1998, V53, P7 HCAPLUS
(3) Cavalcanti, O; Drug Dev Ind Pharm 2002, V28, P157 HCAPLUS (4) Chavan, M; J Pharm Pharmacol 2001, V53, P895 HCAPLUS
(5) Cole, E; Int J Pharm 2002, V231, P83 HCAPLUS
(6) Davaran, S; J Control Release 1999, V58, P279 HCAPLUS
(7) Fukui, E; Int J Pharm 2000, V204, P7 HCAPLUS
(8) Fukui, E; J Control Release 2001, V70, P97 HCAPLUS
(9) Goto, M; J Pharm Pharmcol 2001, V53, P1711 HCAPLUS
(10) Gupta, V; Int J Pharm 2001, V213, P83 HCAPLUS (11) Gupta, V; Int J Pharm 2001, V213, P93 HCAPLUS (12) Hebden, J; Pharm Res 1999, V16, P1087 HCAPLUS (13) Hu, Z; J Control Rel 1998, V56, P293 HCAPLUS
(14) Ichinose, K; Anticancer Drugs 2000, V11, P33 HCAPLUS
(15) Ishibashi, T; I Pharm Sci 1998, V87, P531 HCAPLUS
(16) Ishibashi, T; J Control Release 1999, V59, P361 HCAPLUS
(17) Jeong, Y; J Control Rel 2001, V71, P175 HCAPLUS
(18) Jiang, X; World J Gastroenterol 2002, V8, P158
(19) Jung, Y; J Pharm Sci 2001, V90, P1767 HCAPLUS
(20) Kakoulides, E; J Control Rel 1998, V54, P95 HCAPLUS
(21) Khan, M; J Control Release 1999, V58, P215 MEDLINE
(22) Kievit, E; Cancer Res 1999, V59, P1417 HCAPLUS
(23) Krishnaiah, Y; J Control Rel 1998, V55, P245 HCAPLUS (24) Krishnaiah, Y; J Control Rel 2001, V77, P87 HCAPLUS
(25) Lee, J; J pharm Sci 2001, V90, P1787 HCAPLUS
(26) Leopold, C; Drug Dev Ind Pharm 2000, V26, P1239 HCAPLUS
(27) Lorenao-Lamosa, M; J Control Rel 1998, V52, P109
(28) Macleod, G; Int J Pharm 1999, V187, P251 HCAPLUS
(29) Maris, B; Int J Pharm 2001, V213, P143 HCAPLUS
(30) Marta, R; J Control Rel 1998, V55, P67
(31) McLeod, A; J Pharm Sci 1994, V83, P1284 HCAPLUS (32) Minami, K; J Pharm Sci 1998, V87, P715 HCAPLUS
(33) Muraoka, M; J Control Rel 1998, V52, P119 HCAPLUS
(34) Nykanen, P; Int J Pharm 1999, V184, P251 HCAPLUS (35) Nykanen, P; Int J Pharm 2001, V229, P155 HCAPLUS
(36) Rodriquez, M; J Pharm Pharmacol 2001, V53, P1207 HCAPLUS
(37) Rudolph, M; Eur J Pharm Biopharm 2001, V51, P183 HCAPLUS
(38) Sangalli, M; Boll Chim Farm 1999, V138, P68 HCAPLUS
(39) Sangalli, M; J Control Release 2001, V73, P103 HCAPLUS
(40) Shibata, N; J Pharm Pharmcol 2001, V53, P441 HCAPLUS
(41) Sinha, V; Int J Pharm 2001, V224, P19 HCAPLUS (42) Sinha, V; Pharm Res 2001, V18, P557 HCAPLUS (43) Stubbe, B; J Control Rel 2001, V75, P103 HCAPLUS
(44) Takaya, T; J Control Release 1998, V50, P111 HCAPLUS
(45) Takaya, T; J Drug Target 1997, V4, P271 HCAPLUS
(46) Tozaki, H; J Pharm Pharmacol 1999, V51, P1107 HCAPLUS
(47) Tozaki, H; J Pharm Pharmacol 1999, V51, P257 HCAPLUS
(48) Tozaki, H; J Pharm Sci 2001, V90, P89 HCAPLUS
(49) Villar-Lopez, M; Int J Pharm 1999, V179, P229 HCAPLUS
(50) Wang, S; J Control Rel 1998, V53, P39 HCAPLUS
(51) Yang, L; Int J Pharm 2002, V235, P1 HCAPLUS
(52) Yano, H; J Pharm Sci 2001, V90, P2103 HCAPLUS
(53) Yano, H; J Pharm Sci 2001, V90, P493 HCAPLUS
      50-02-2, Dexamethasone
      RL: PAC (Pharmacological activity); PRP (Properties); RCT (Reactant); THU
      (Therapeutic use); BIOL (Biological study); RACT (Reactant or reagent);
```

(synthesis of an enzyme-dependent prodrug and evaluation of its

USES (Uses)

potential for colon targeting)

RN 50-02-2 HCAPLUS

CN Pregna-1, 4-diene-3, 20-dione, 9-fluoro-11, 17, 21-trihydroxy-16-methyl-,  $(11\beta, 16\alpha)$ - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

## IT 156228-67-0P

RL: PAC (Pharmacological activity); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(synthesis of an enzyme-dependent prodrug and evaluation of its potential for colon targeting)

RN 156228-67-0 HCAPLUS

CN Dextran,  $(11\beta, 16\alpha)$ -9-fluoro-11,17-dihydroxy-16-methyl-3,20-dioxopregna-1,4-dien-21-yl butanedioate (9CI) (CA INDEX NAME)

CM 1

CRN 9004-54-0 CMF Unspecified

CCI PMS, MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM 2

CRN 3800-86-0 CMF C26 H33 F O8

## IT 3800-86-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(synthesis of an enzyme-dependent prodrug and evaluation of its potential for colon targeting)

RN 3800-86-0 HCAPLUS

CN Pregna-1, 4-diene-3, 20-dione, 21-(3-carboxy-1-oxopropoxy)-9-fluoro-11, 17-dihydroxy-16-methyl-,  $(11\beta,16\alpha)$ - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

```
L46 ANSWER 21 OF 65 HCAPLUS COPYRIGHT 2004 ACS on STN
```

AN 2002:964223 HCAPLUS

DN 138:44756

ED Entered STN: 20 Dec 2002

TI Conjugates of polysaccharide polymers of natural origin

IN Volpato, Ivo; Bizzini, Bernard Emile; Abreu, Roberto Carlos; Lippmann,

PA Bartholdy-Consultadoria e Servicos Ltd., Port.

SO PCT Int. Appl., 72 pp.

CODEN: PIXXD2

DT Patent

LA English

IC ICM A61K047-48

CC 63-7 (Pharmaceuticals)

Section cross-reference(s): 1, 17, 40, 62

FAN.CNT 1

FAN.CNT I																			
	PATENT NO.					KIND		DATE		APPLICATION NO.						DATE			
ΡI	WO	WO 2002100440				A1		20021219		WO 2002-EP6371						20020611			
		W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	AZ,	BA,	BB,	BG,	BR,	BY,	ΒZ,	CA,	CH,	CN,	
			CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FΙ,	GB,	GD,	GE,	GH,	
			GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	ΚP,	KR,	ΚZ,	LC,	LK,	LR,	
			LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	ΜZ,	NO,	ΝZ,	OM,	PH,	
			PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ТJ,	TM,	TN,	TR,	TT,	TZ,	
			UA,	UG,	US,	UZ,	VN,	YU,	ZA,	ZM,	ZW,	AM,	ΑZ,	BY,	KG,	ΚZ,	MD,	RU,	
			ТJ,	TM															
		RW:	GH,	GM,	KE,	LS,	MW,	ΜZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AT,	BE,	CH,	
			CY,	DE,	DK,	ES,	FI,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	ΝL,	PT,	SE,	TR,	
			BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	ΝE,	SN,	TD,	TG	
	ΕP	EP 1399192				A1		20040324			EP 2002-748760					20020611			
		R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,	

```
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
                    A1
     US 2004219217
                                           US 2004-481139
                                20041104
                                                                   20040614
PRAI IT 2001-MI1238
                         Α
                                20010612
     WO 2002-EP6371
                        W
                                20020611
CLASS
 PATENT NO. CLASS PATENT FAMILY CLASSIFICATION CODES
 ______
 WO 2002100440 ICM A61K047-48
 US 2004219217 ECLA A61K047/48K8
    The present invention relates to the use of fibers of polysaccharide
     polymers of natural origin, preferably of vegetal origin, such as, for
     instance, cellulose or cotton, or the use of yarns, non-woven fabrics (or
     felts), or fabrics obtained from those fibers in order to obtain
    pharmaceutical, cosmetic or hygienic products, or products to be used in
     the household or in the food industry. In particular, the polysaccharide
    polymers according to the invention can be used to obtain plasters,
     gauzes, sanitary cotton wool, vaginal and surgical tampons, bandages,
    gloves, stockings, masks, curtains, carpets and the like, or to obtain filters or wrappings for food. For example, procaine hydrochloride was
     directly conjugated to cotton fibers through Schiff base; 76.3%
    procaine was released after 18 h by hydrolysis of the conjugates
ST
    polysaccharide fiber biol active compd conjugate
IΤ
    Antibodies and Immunoglobulins
    RL: DEV (Device component use); THU (Therapeutic use); BIOL (Biological
    study); USES (Uses)
        (IqG, conjugates with cotton fibers; conjugates of
        polysaccharides with biol. active substances for medicinal, cosmetic
       and hygienic uses)
ΙT
    Cosmetics
        (antiaging; conjugates of polysaccharides with biol. active
        substances for medicinal, cosmetic and hygienic uses)
IT
    RL: COS (Cosmetic use); FFD (Food or feed use); TEM (Technical or
     engineered material use); THU (Therapeutic use); BIOL (Biological study);
    USES (Uses)
        (cellulosic; conjugates of polysaccharides with biol. active
        substances for medicinal, cosmetic and hygienic uses)
    Wound healing promoters
ΙT
        (cicatrizants, conjugates with cotton fibers;
       conjugates of polysaccharides with biol. active substances for
       medicinal, cosmetic and hygienic uses)
    Food packaging materials
ΙΤ
        (conjugates of polysaccharides with biol. active substances
        for food industry)
IT
    Anti-inflammatory agents
    Antibacterial agents
    Cotton fibers
    Fungicides
    Medical goods
    Nonwoven fabrics
    Textiles
    Yarns
        (conjugates of polysaccharides with biol. active substances
        for medicinal, cosmetic and hygienic uses)
    Schiff bases
IT
    RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (conjugates of polysaccharides with biol. active substances
```

```
for medicinal, cosmetic and hygienic uses)
ΙT
     Disinfectants
     Immunostimulants
        (conjugates with cotton fibers; conjugates of
        polysaccharides with biol. active substances for medicinal, cosmetic
        and hygienic uses)
ΤТ
     Corticosteroids, biological studies
     Elastins
     Fibrinogens
     Glycoproteins
     RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological
     study); PREP (Preparation); USES (Uses)
        (conjugates with cotton fibers; conjugates of
        polysaccharides with biol. active substances for medicinal, cosmetic
        and hygienic uses)
IT
     Fibronectins
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (conjugates with cotton fibers; conjugates of
        polysaccharides with biol. active substances for medicinal, cosmetic
        and hygienic uses)
ΙT
     Acaricides
        (cotton fabric-conjugated; conjugates of
        polysaccharides with biol. active substances for medicinal, cosmetic
        and hygienic uses)
ΙT
     Medical goods
        (dressings; conjugates of polysaccharides with biol. active
        substances for medicinal, cosmetic and hygienic uses)
TΤ
     Food
        (filters or wrappings; conjugates of polysaccharides with
        biol. active substances for food industry)
     Medical goods
ΙT
        (gauzes; conjugates of polysaccharides with biol. active
        substances for medicinal, cosmetic and hygienic uses)
ΙΤ
     Medical goods
        (gloves, antiallergic; conjugates of polysaccharides with
        biol. active substances for medicinal, cosmetic and hygienic uses)
ΙT
        (local, conjugates with cotton fibers; conjugates
        of polysaccharides with biol. active substances for medicinal, cosmetic
        and hygienic uses)
ΙT
     Gloves
        (medical, antiallergic; conjugates of polysaccharides with
        biol. active substances for medicinal, cosmetic and hygienic uses)
TΤ
     Synthetic polymeric fibers, biological studies
     RL: COS (Cosmetic use); FFD (Food or feed use); TEM (Technical or
     engineered material use); THU (Therapeutic use); BIOL (Biological study);
     USES (Uses)
        (polysaccharides; conjugates of polysaccharides with biol.
        active substances for medicinal, cosmetic and hygienic uses)
    Medical goods
TΤ
        (sanitary napkins; conjugates of polysaccharides with biol.
        active substances for medicinal, cosmetic and hygienic uses)
    Amines, biological studies
IT
    RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological
     study); PREP (Preparation); USES (Uses)
        (secondary; conjugates of polysaccharides with biol. active
        substances for medicinal, cosmetic and hygienic uses)
TΤ
    Medical goods
        (tampons; conjugates of polysaccharides with biol. active
```

```
substances for medicinal, cosmetic and hygienic uses)
IT
     Cosmetics
        (wrinkle-preventing; conjugates of polysaccharides with biol.
        active substances for medicinal, cosmetic and hygienic uses)
-59-9, Tosyl chloride 111-30-8, Glutaraldehyde 1892-57-5, EDAC
ΙT
     98-59-9, Tosyl chloride
     10387-40-3, Potassium thioacetate
     RL: RCT (Reactant); RACT (Reactant or reagent)
         (conjugates of polysaccharides with biol. active substances
        for medicinal, cosmetic and hygienic uses)
ΙT
     51-05-8DP, Procaine hydrochloride, conjugates with oxidized
                     52-90-4DP, L-Cysteine, conjugates with cotton
     cotton fibers
                                       56-87-1DP, L-Lysine, conjugates
     fibers and biol. active compds.
     with cotton fibers and biol. active compds.
                                                     120-51-4DP, Benzyl benzoate,
     azo derivs., conjugates with cotton fibers and lysine or
                  122-11-2DP, Sulfadimethoxine, conjugates with and polylysine 123-08-0DP, 4-Hydroxybenzaldehyde,
     polylysine
     cotton fibers and polylysine
     conjugates with derivatized cotton fibers
                                                   488-69-7DP, FDP,
     conjugates with cotton fibers and lysine or polylysine
     547-32-0DP, Sulfadiazine sodium, conjugates with oxidized cotton
              1071-93-8DP, Adipic acid dihydrazide, reaction products with
     Factor VIII, conjugates with cotton fibers
                                                    1405-87-4DP,
     Bacitracin, conjugates with oxidized cotton fibers and
                 1405-97-6DP, Gramicidin, conjugates with oxidized
     polylysine
     cotton fibers and polylysine
                                     9001-12-1DP, Collagenase,
                                       9001-26-7DP, Prothrombin,
     conjugates with cotton fibers
     conjugates with cotton fibers and lysine or polylysine
     9001-62-1DP, Lipase, conjugates with cotton fibers 9004-61-9DP, Hyaluronic acid, conjugates with
                      9005-49-6DP, Heparin, conjugates with cotton
     cotton fibers
              22204-53-1DP, Naproxen, conjugates with cotton fibers
     fibers
     25104-18-1DP, Poly(L-lysine), conjugates with cotton fibers and
                             38000-06-5DP, Poly(L-lysine), conjugates
     biol. active compds.
     with cotton fibers and biol. active compds.
                                                     113189-02-9DP, Blood
     coagulation factor VIII, reaction products with adipic acid dihydrazide,
     conjugates with cotton fibers and cysteine 478256-48-3DP
     , conjugates with cysteine and cotton fibers
     RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological
     study); PREP (Preparation); USES (Uses)
        (conjugates of polysaccharides with biol. active substances
        for medicinal, cosmetic and hygienic uses)
     52-90-4, L-Cysteine, reactions
                                        56-84-8, L-Aspartic acid, reactions
ΙT
     56-86-0, L-Glutamic acid, reactions 56-87-1, L-Lysine, reactions
     302-01-2, Hydrazine, reactions
                                       7783-06-4, Hydrogen sulfide, reactions
     29768-80-7
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (linker; conjugates of polysaccharides with biol.
        active substances for medicinal, cosmetic and hygienic uses)
IT
     17333-88-9P
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (linker; conjugates of polysaccharides with biol.
        active substances for medicinal, cosmetic and hygienic uses)
              THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE.CNT
RE
(1) American Cyanamid Co; GB 900803 A 1962 HCAPLUS
(2) Cetus Corp; WO 9015628 A 1990 HCAPLUS
(3) Ciba Ltd; GB 816750 A 1959 HCAPLUS
(4) Edwards, J; BOOK OF ABSTRACTS, 215TH ACS NATIONAL MEETING 1998
(5) Kalpaxis, D; INT J BIOCHEM 1985, V17(1), P61 HCAPLUS
```

- (6) Kuraray Co Ltd; JP 03101618 A 1991 HCAPLUS
- (7) M U R S T; WO 9311803 A 1993 HCAPLUS
- (8) Roehm Gmbh; DE 4029374 A 1992 HCAPLUS
- (9) Scripps Lab Inc; WO 9738312 A 1997 HCAPLUS
- (10) Univ Bar Ilan; EP 0611573 A 1994 HCAPLUS
- IT 9004-61-9DP, Hyaluronic acid, conjugates with cotton fibers 478256-48-3DP, conjugates with cysteine

and cotton fibers
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological

study); PREP (Preparation); USES (Uses) (conjugates of polysaccharides with biol. active substances

(conjugates of polysaccharides with biol. active substances for medicinal, cosmetic and hygienic uses)

RN 9004-61-9 HCAPLUS

CN Hyaluronic acid (8CI, 9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

RN 478256-48-3 HCAPLUS

CN Benzoic acid,  $4-[[(11\beta)-11,17,21-\text{trihydroxy}-3,20-\text{dioxopregn}-4-\text{en}-12-\text{yl}]$ azo]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry unknown.

- L46 ANSWER 22 OF 65 HCAPLUS COPYRIGHT 2004 ACS on STN
- AN 2002:932629 HCAPLUS
- DN 138:181073
- ED Entered STN: 10 Dec 2002
- TI Estrogen stimulates arachidonoylethanolamide release from human endothelial cells and platelet activation
- AU Maccarrone, Mauro; Bari, Monica; Battista, Natalia; Finazzi-Agro, Alessandro
- CS Department of Experimental Medicine and Biochemical Sciences, University of Rome Tor Vergata, Rome, I-00133, Italy
- SO Blood (2002), 100(12), 4040-4048 CODEN: BLOOAW; ISSN: 0006-4971
- PB American Society of Hematology
- DT Journal
- LA English
- CC 2-4 (Mammalian Hormones)
- AB Estrogen replacement therapy has been associated with reduction of cardiovascular

events in postmenopausal women, though the mechanism for this benefit remains unclear. At physiol. concns. estrogen activates the anandamide

membrane transporter of human endothelial cells and leads to rapid elevation of calcium (apparent within 5 min) and release of nitric oxide (within 15 min). These effects are mediated by estrogen binding to a surface receptor, which shows an apparent dissociation constant (Kd) of  $9.4\pm1.4$  nM, a maximum binding (Bmax) of  $356\pm12$  fmol + mg protein-1, and an apparent mol. mass of approx. 60 kDa. The authors also show that estrogen binding to surface receptors leads to stimulation of the anandamide-synthesizing enzyme phospholipase D and to inhibition of the anandamide-hydrolyzing enzyme fatty acid amide hydrolase, the latter effect mediated by 15-lipoxygenase activity. Because the endothelial transporter is shown to move anandamide across the cell membranes bidirectionally, taken together these data suggest that the physiol. activity of estrogen is to stimulate the release, rather than the uptake, of anandamide from endothelial cells. Moreover, the authors show that anandamide released from estrogen-stimulated endothelial cells, unlike estrogen itself, inhibits the secretion of serotonin from ADP-stimulated platelets. Therefore, it is suggested that the peripheral actions of anandamide could be part of the mol. events responsible for the beneficial effects of estrogen.

- ST estrogen receptor anandamide transporter vascular endothelium platelet activation human; calcium nitric oxide signal transduction estrogen anandamide endocannabinoid
- IT Platelet (blood)

(activation; estrogen stimulates arachidonoylethanolamide release from human endothelial cells and platelet activation)

- IT Transport proteins
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (arachidonoylethanolamide membrane transporter (AMT); estrogen stimulates arachidonoylethanolamide release from human endothelial cells and platelet activation)
- IT Cannabinoids
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (endo-; estrogen stimulates arachidonoylethanolamide release from human endothelial cells and platelet activation)
- IT Blood vessel

(endothelium; estrogen stimulates arachidonoylethanolamide release from human endothelial cells and platelet activation)

- IT Human
  - Signal transduction, biological

(estrogen stimulates arachidonoylethanolamide release from human endothelial cells and platelet activation)

- IT Albumins, biological studies
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (serum, conjugate with  $17\beta$ -estradiol

6-(O-carboxymethyl)oxime; estrogen stimulates arachidonoylethanolamide release from human endothelial cells and platelet activation)

- IT Estrogen receptors
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (surface; estrogen stimulates arachidonoylethanolamide release from human endothelial cells and platelet activation)
- IT Cannabinoid receptors
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (type CB1; estrogen stimulates arachidonoylethanolamide release from human endothelial cells and platelet activation)
- IT Vein
  - (umbilical, endothelium, human; estrogen stimulates arachidonoylethanolamide release from human endothelial cells and platelet activation)
- IT Estrogen receptors

```
RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (β; estrogen stimulates arachidonoylethanolamide release from
        human endothelial cells and platelet activation)
                         50-28-2, Estradiol, biological studies
IT
     50-23-7, Cortisol
     50-67-9, Serotonin, biological studies
                                             57-91-0, 17\alpha-Estradiol
     58-64-0, 5'-ADP, biological studies
                                          60-92-4, CAMP
                                                           7440-70-2, Calcium,
                          9001-87-0, Phospholipase D
     biological studies
                                                      10102-43-9, Nitric
                               35048-47-6, 17β-Estradiol
     oxide, biological studies
                                35048-47-6D, 17\beta-Estradiol
     6-(O-carboxymethyl)oxime
     6-(O-carboxymethyl)oxime, conjugate with bovine serum albumin
     82249-77-2, 15-Lipoxygenase 94421-68-8, Anandamide
                                                            125978-95-2, Nitric
                      153301-19-0, Fatty acid amide hydrolase
     oxide synthase
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (estrogen stimulates arachidonoylethanolamide release from human
        endothelial cells and platelet activation)
                     145-63-1, Suramin 404-86-4, Capsaicin
ΙT
     67-42-5, EGTA
                                                               1191-85-1, ETYA
     10540-29-1, Tamoxifen
                            13956-29-1, Cannabidiol
                                                       22972-55-0
                                                                    50903-99-6,
              107761-24-0, ST638
                                   112830-95-2, HU-210
                                                         129453-61-8, ICI182780
     L-NAME
                               149301-79-1, Arachidonyl trifluoromethyl ketone
     138977-28-3, Capsazepine
     168273-06-1, SR141716 183718-77-6, AM404
                                                192703-06-3, SR144528
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (estrogen stimulates arachidonoylethanolamide release from human
        endothelial cells and platelet activation in relation to modulation by
        various compds.)
              THERE ARE 50 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE.CNT
       50
RE
(1) Alberich Jorda, M; Blood 2002, V99, P2786
(2) Bar, J; Thromb Haemost 2000, V84, P695 HCAPLUS
(3) Batkai, S; Nat Med 2001, V7, P827 HCAPLUS
(4) Beltramo, M; Neuroreport 2000, V11, P1231 HCAPLUS
(5) Berdyshev, E; Chem Phys Lipids 2000, V108, P169 HCAPLUS
(6) Bisogno, T; J Biol Chem 1997, V272, P3315 HCAPLUS
(7) Bourgoin, S; J Biol Chem 1992, V267, P11908 HCAPLUS
(8) Brash, A; J Biol Chem 1999, V274, P23679 HCAPLUS
(9) Bredt, D; Proc Natl Acad Sci U S A 1990, V87, P682 HCAPLUS
(10) Camacho, M; J Biol Chem 1995, V270, P17279 HCAPLUS
(11) Cenci, S; J Clin Invest 2000, V106, P1229 HCAPLUS
(12) Chen, Z; J Clin Invest 1999, V103, P401 HCAPLUS
(13) Daniel, J; J Biol Chem 1998, V273, P2024 HCAPLUS
(14) Di Marzo, V; Biochim Biophys Acta 1998, V1392, P153 HCAPLUS
(15) Di Marzo, V; Trends Pharmacol Sci 2001, V22, P346 HCAPLUS
(16) Exton, J; J Biol Chem 1997, V272, P15579 HCAPLUS
(17) Giuffrida, A; Anal Biochem 2000, V280, P87 HCAPLUS
(18) Hansen, H; Chem Phys Lipids 2000, V108, P135 HCAPLUS
(19) Hanus, L; Proc Natl Acad Sci U S A 2001, V98, P3662 HCAPLUS
(20) Hao, S; Eur J Pharmacol 2000, V392, P147 HCAPLUS
(21) Hillard, C; Chem Phys Lipids 2000, V108, P123 HCAPLUS
(22) Jarai, Z; Proc Natl Acad Sci U S A 1999, V96, P14136 HCAPLUS
(23) Khetawat, G; Blood 2000, V95, P2289 HCAPLUS
(24) Kunos, G; Chem Phys Lipids 2000, V108, P159 HCAPLUS
(25) Liu, J; Biochem J 2000, V346, P835 HCAPLUS
(26) MacDonald, J; Nature 2001, V410, P527
(27) Maccarrone, M; Anal Biochem 1999, V267, P314 HCAPLUS
(28) Maccarrone, M; Eur J Biochem 2001, V268, P819 HCAPLUS
(29) Maccarrone, M; FEBS Lett 1999, V447, P277 HCAPLUS
(30) Maccarrone, M; J Biol Chem 2000, V275, P13484 HCAPLUS
(31) Maccarrone, M; J Biol Chem 2000, V275, P31938 HCAPLUS
(32) Maccarrone, M; J Immunol 2001, V166, P7183 HCAPLUS
(33) Mendelsohn, M; N Engl J Med 1999, V340, P1801 HCAPLUS
```

- (34) Moesgaard, B; J Lipid Res 2000, V41, P985 HCAPLUS
- (35) Najib, A; FEBS Lett 2000, V486, P136 HCAPLUS
- (36) Nealen, M; Circ Res 2001, V88, P438 HCAPLUS
- (37) Pertwee, R; Pharmacol Ther 1997, V74, P129 HCAPLUS
- (38) Piornelli, D; Proc Natl Acad Sci U S A 1999, V96, P5802
- (39) Razandi, M; Mol Endocrinol 1999, V13, P307 HCAPLUS
- (40) Rogers, K; Life Sci 2001, V69, P1817 HCAPLUS
- (41) Sachais, B; Curr Atheroscler Rep 2001, V3, P412 MEDLINE
- (42) Stefano, G; Blood 2000, V95, P3951 HCAPLUS
- (43) Stefano, G; Circulation 2000, V101, P1594 HCAPLUS
- (44) Stefano, G; J Immunol 1999, V163, P3758 HCAPLUS
- (45) Storey, R; Br J Haematol 2000, V110, P925 HCAPLUS
- (46) Sun, S; J Neurochem 1999, V73, P334 HCAPLUS
- (47) Thomas, E; Proc Natl Acad Sci U S A 1997, V94, P14115 HCAPLUS
- (48) Ueda, N; Chem Phys Lipids 2000, V108, P107 HCAPLUS
- (49) Ueda, N; J Biol Chem 2001, V276, P35552 HCAPLUS
- (50) Walker, J; Proc Natl Acad Sci U S A 1999, V96, P12198 HCAPLUS
- IT **50-23-7**, Cortisol
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (estrogen stimulates arachidonoylethanolamide release from human endothelial cells and platelet activation)
- RN 50-23-7 HCAPLUS
- CN Pregn-4-ene-3,20-dione, 11,17,21-trihydroxy-, (11 $\beta$ )- (9CI) (CA INDEX NAME)

- L46 ANSWER 23 OF 65 HCAPLUS COPYRIGHT 2004 ACS on STN
- AN 2002:928122 HCAPLUS
- DN 138:12504
- ED Entered STN: 06 Dec 2002
- TI Method for assaying biomolecules and other constituents using indicator conjugates with synthetic nucleounits in lateral flow, liquid, and dry chemistry techniques
- IN Smith, Jack V.
- PA USA
- SO U.S. Pat. Appl. Publ., 46 pp. CODEN: USXXCO
- DT Patent
- LA English
- IC ICM C12Q001-68
- NCL 435006000
- CC 9-16 (Biochemical Methods)
- FAN.CNT 1
- PATENT NO.
- KIND DATE

\_\_\_\_ PI US 2002182600 PRAI US 2001-829563 A1 20021205 US 2001-829563 20010411 20010411

CLASS

PATENT NO. CLASS PATENT FAMILY CLASSIFICATION CODES \_\_\_\_\_

US 2002182600 ICM C12Q001-68 NCL 435006000 AB

The present invention is a method for the use of particles made up of nucleotides or fragments of base groups of DNA and RNA mols. herein referred to as synthetic nucleounits which can be used as recognition mols. with specificity and sensitivity significantly greater than that of antibodies which are used in clin. diagnostics, biotechnol., and research. The method for detecting an analyte using nucleounits targeted to the analyte comprises (1) identifying a nucleounit from a mixture of synthetic random sequences of nucleounit libraries, (2) conjugating the nucleounit to an indicator for the analyte, and (3) detecting the analyte using the nucleounit-indicator conjugate in a buffer. Step 1 is carried out by (a) contacting the analyte with the mixture of synthetic random sequences of nucleounit libraries such that some nucleounits bind the analyte, (b) removing the unbound nucleounits by partitioning, and (c) amplifying the remaining nucleounits by PCR to obtain an enriched solution of nucleounits with high affinity for the analyte. Thus, a method and lateral flow test strip for detection of cytomegalovirus (CMV) presence in a biol. sample such as serum or urine is described. The strip is prepared with three solns., one containing anti-CMV antibodies, one containing

"nucleounit

to CMV antibody conjugated to red microparticles" and "red microparticles", and another containing "nucleounit to colored particles". The "nucleounit" may be an oligonucleotide aptamer specific for anti-CMV

- dipstick lateral flow device oligonucleotide aptamer biomol drug detection STΙT Corticosteroids, analysis
  - RL: ANT (Analyte); ANST (Analytical study)

(17-hydroxy; method for assaying biomols. and other constituents using indicator conjugates with synthetic nucleounits in lateral flow, liquid, and dry chemical techniques)

Steroids, analysis ΙT

RL: ANT (Analyte); ANST (Analytical study)

(17-ketogenic; method for assaying biomols. and other constituents using indicator conjugates with synthetic nucleounits in lateral flow, liquid, and dry chemical techniques)

IΤ

RL: ANT (Analyte); ANST (Analytical study)

(C-reactive; method for assaying biomols. and other constituents using indicator conjugates with synthetic nucleounits in lateral flow, liquid, and dry chemical techniques)

IΤ Antigens

RL: ANT (Analyte); ANST (Analytical study)

(EBNA (Epstein-Barr virus-associated nuclear antigen), IgG binding to; method for assaying biomols. and other constituents using indicator conjugates with synthetic nucleounits in lateral flow, liquid, and dry chemical techniques)

Antigens TΤ

RL: ANT (Analyte); ANST (Analytical study) (Epstein-Barr early; method for assaying biomols. and other constituents using indicator conjugates with synthetic nucleounits in lateral flow, liquid, and dry chemical techniques)

Cytomegalovirus ΙT

```
Mycoplasma
     Rubella
     Toxoplasma
         (IgG and IgM binding to; method for assaying biomols. and other
        constituents using indicator conjugates with synthetic nucleounits in lateral flow, liquid, and dry chemical techniques)
ΙT
     Helicobacter pylori
     Human herpesvirus 1
     Human herpesvirus 2
         (IgG binding to; method for assaying biomols. and other constituents
        using indicator conjugates with synthetic nucleounits in
        lateral flow, liquid, and dry chemical techniques)
ΙT
     Legionella
        (IgG, IgM, and IgA binding to; method for assaying biomols. and other
        constituents using indicator conjugates with synthetic
        nucleounits in lateral flow, liquid, and dry chemical techniques)
     Antibodies and Immunoglobulins
ΙT
     RL: ANT (Analyte); ANST (Analytical study)
         (IgG, anti-peroxidase; method for assaying biomols. and other
        constituents using indicator conjugates with synthetic nucleounits in lateral flow, liquid, and dry chemical techniques)
IT
     Antigens
     RL: ANT (Analyte); ANST (Analytical study)
        (VCA (viral capsid antigen), IgG and IgM binding to Epstein-Barr; method for assaying biomols. and other constituents using indicator
        conjugates with synthetic nucleounits in lateral flow, liquid,
        and dry chemical techniques)
ΙT
     Entamoeba histolytica
         (amebiasis; method for assaying biomols. and other constituents using
        indicator conjugates with synthetic nucleounits in lateral
        flow, liquid, and dry chemical techniques)
ΤТ
     Proteins
     RL: ANT (Analyte); ANST (Analytical study)
         (amyloid-associated; method for assaying biomols. and other constituents
        using indicator conjugates with synthetic nucleounits in
        lateral flow, liquid, and dry chemical techniques)
IT
     Neutrophil
        (antibodies binding to; method for assaying biomols. and other
        constituents using indicator conjugates with synthetic
        nucleounits in lateral flow, liquid, and dry chemical techniques)
IT
     Cardiolipins
     RL: ANT (Analyte); ANST (Analytical study)
         (antibodies binding to; method for assaying biomols. and other
        constituents using indicator conjugates with synthetic
        nucleounits in lateral flow, liquid, and dry chemical techniques)
     Antibodies and Immunoglobulins
ΙT
     RL: ANT (Analyte); ANST (Analytical study)
         (antinuclear; method for assaying biomols. and other constituents using
        indicator conjugates with synthetic nucleounits in lateral
        flow, liquid, and dry chemical techniques)
     Antibodies and Immunoglobulins
ΙT
     RL: ANT (Analyte); ANST (Analytical study)
         (autoantibodies, Jo-1; method for assaying biomols. and other
        constituents using indicator conjugates with synthetic
        nucleounits in lateral flow, liquid, and dry chemical techniques)
     Antibodies and Immunoglobulins
TΤ
     RL: ANT (Analyte); ANST (Analytical study)
        (autoantibodies, SS-A/Ro; method for assaying biomols. and other
        constituents using indicator conjugates with synthetic
```

```
nucleounits in lateral flow, liquid, and dry chemical techniques)
ΙT
     Antibodies and Immunoglobulins
     RL: ANT (Analyte); ANST (Analytical study)
         (autoantibodies, SS-B/La; method for assaying biomols. and other
        constituents using indicator conjugates with synthetic nucleounits in lateral flow, liquid, and dry chemical techniques)
ΙT
     Antibodies and Immunoglobulins
     RL: ANT (Analyte); ANST (Analytical study)
         (autoantibodies, Sc1-70; method for assaying biomols. and other
        constituents using indicator conjugates with synthetic nucleounits in lateral flow, liquid, and dry chemical techniques)
     Antibodies and Immunoglobulins
IΤ
     RL: ANT (Analyte); ANST (Analytical study)
         (autoantibodies, Sm (Smith antigen); method for assaying biomols. and
        other constituents using indicator conjugates with synthetic
        nucleounits in lateral flow, liquid, and dry chemical techniques)
ΙT
     Antibodies and Immunoglobulins
     RL: ANT (Analyte); ANST (Analytical study)
         (autoantibodies, Sm/RNP; method for assaying biomols. and other
        constituents using indicator conjugates with synthetic nucleounits in lateral flow, liquid, and dry chemical techniques)
IT
     Antigens
     RL: ANT (Analyte); ANST (Analytical study)
         (cancer antigen 125; method for assaying biomols. and other
        constituents using indicator conjugates with synthetic
        nucleounits in lateral flow, liquid, and dry chemical techniques)
ΙT
     Hemoglobins
     RL: ANT (Analyte); ANST (Analytical study)
         (carboxyhemoglobins; method for assaying biomols. and other
        constituents using indicator conjugates with synthetic nucleounits in lateral flow, liquid, and dry chemical techniques)
ΤТ
     Latex
        (colored particles of, conjugates; method for assaying
        biomols. and other constituents using indicator conjugates
        with synthetic nucleounits in lateral flow, liquid, and dry chemical
        techniques)
     Metals, biological studies
IT
     Plastics, biological studies
     Rubber, biological studies
     RL: ARG (Analytical reagent use); DGN (Diagnostic use); ANST (Analytical
     study); BIOL (Biological study); USES (Uses)
        (colored particles of, conjugates; method for assaying
        biomols. and other constituents using indicator conjugates
        with synthetic nucleounits in lateral flow, liquid, and dry chemical
        techniques)
IT
     Complement
     RL: ANT (Analyte); ANST (Analytical study)
         (components of; method for assaying biomols. and other constituents
        using indicator conjugates with synthetic nucleounits in
        lateral flow, liquid, and dry chemical techniques)
IT
     RL: ANT (Analyte); ANST (Analytical study)
         (double-stranded, antibodies binding to; method for assaying biomols.
        and other constituents using indicator conjugates with
        synthetic nucleounits in lateral flow, liquid, and dry chemical techniques)
ΙT
     Antigens
     RL: ANT (Analyte); ANST (Analytical study)
        (extractable nuclear; method for assaying biomols. and other
        constituents using indicator conjugates with synthetic
```

## Cordero-Garcia PCT/US03/26233

```
nucleounits in lateral flow, liquid, and dry chemical techniques)
ΙT
     Fats and Glyceridic oils, analysis
     RL: ANT (Analyte); ANST (Analytical study)
        (fecal; method for assaying biomols. and other constituents using
        indicator conjugates with synthetic nucleounits in lateral
        flow, liquid, and dry chemical techniques)
IT
     Proteins
     RL: ANT (Analyte); ANST (Analytical study)
        (fetoproteins; method for assaying biomols. and other constituents
        using indicator conjugates with synthetic nucleounits in
        lateral flow, liquid, and dry chemical techniques)
ΙT
     Enzymes, biological studies
     RL: ARG (Analytical reagent use); DGN (Diagnostic use); ANST (Analytical
     study); BIOL (Biological study); USES (Uses)
        (galactosaminidase, indicator; method for assaying biomols. and other
        constituents using indicator conjugates with synthetic
        nucleounits in lateral flow, liquid, and dry chemical techniques)
TΥ
     Enzymes, biological studies
     RL: ARG (Analytical reagent use); DGN (Diagnostic use); ANST (Analytical
     study); BIOL (Biological study); USES (Uses)
        (glucosaminidase, indicator; method for assaying biomols. and other
        constituents using indicator conjugates with synthetic nucleounits in lateral flow, liquid, and dry chemical techniques)
IT
     Lipoproteins
     RL: ANT (Analyte); ANST (Analytical study)
        (high-d.; method for assaying biomols. and other constituents using
        indicator conjugates with synthetic nucleounits in lateral
        flow, liquid, and dry chemical techniques)
     Enzymes, biological studies
ΙT
     RL: ARG (Analytical reagent use); DGN (Diagnostic use); ANST (Analytical
     study); BIOL (Biological study); USES (Uses)
        (hydroxybenzoate hydroxylase, indicator; method for assaying biomols.
        and other constituents using indicator conjugates with
        synthetic nucleounits in lateral flow, liquid, and dry chemical techniques)
IT
     Enzymes, biological studies
     RL: ARG (Analytical reagent use); DGN (Diagnostic use); ANST (Analytical
     study); BIOL (Biological study); USES (Uses)
        (maltosidase, indicator; method for assaying biomols. and other
        constituents using indicator conjugates with synthetic
        nucleounits in lateral flow, liquid, and dry chemical techniques)
IT
     Angiogenesis
     Blood
     Blood analysis
     Human herpesvirus 3
     Human immunodeficiency virus
     Leukocyte
     Urine analysis
        (method for assaying biomols. and other constituents using indicator
        conjugates with synthetic nucleounits in lateral flow, liquid,
        and dry chemical techniques)
     Albumins, analysis
TΨ
     Alcohols, analysis
     Antibodies and Immunoglobulins
     Antibodies and Immunoglobulins
     Apolipoproteins
     Bile acids
     Cannabinoids
     Carotenes, analysis
     Catecholamines, analysis
```

```
Estrogens
Fatty acids, analysis
Ferritins
Fibrinogens
Gastric acid
Glycerides, analysis
Gonadotropins
Haptoglobin
Hemoglobins
Hemoglobins, methemoglobins
Hemopexins
Ketone bodies
Lecithins
Lipoproteins
Melanins
Mucopolysaccharides, analysis
Myelin basic protein
Myoglobins
Opioids
Pentoses
Phenols, analysis
Phospholipids, analysis
Prostaglandins
Prostate-specific antigen
Rheumatoid factors
Thyroglobulin
Transcortins
Transferrins
Transthyretin
Vitamins
  α 1-Acid glycoprotein
RL: ANT (Analyte); ANST (Analytical study)
   (method for assaying biomols. and other constituents using indicator
   conjugates with synthetic nucleounits in lateral flow, liquid,
   and dry chemical techniques)
Antibodies and Immunoglobulins
RL: ANT (Analyte); ANST (Analytical study)
   (microsomal; method for assaying biomols. and other constituents using
   indicator conjugates with synthetic nucleounits in lateral
   flow, liquid, and dry chemical techniques)
Aptamers
   (oligonucleotide; method for assaying biomols. and other constituents
   using indicator conjugates with synthetic nucleounits in
   lateral flow, liquid, and dry chemical techniques)
Antibodies and Immunoglobulins
RL: ANT (Analyte); ANST (Analytical study)
   (thyroid; method for assaying biomols. and other constituents using
   indicator conjugates with synthetic nucleounits in lateral
   flow, liquid, and dry chemical techniques)
Globulins, analysis
RL: ANT (Analyte); ANST (Analytical study)
   (thyroxine-binding; method for assaying biomols. and other constituents
   using indicator conjugates with synthetic nucleounits in
   lateral flow, liquid, and dry chemical techniques)
Pigments, biological
   (urobilinogens; method for assaying biomols. and other constituents
   using indicator conjugates with synthetic nucleounits in
   lateral flow, liquid, and dry chemical techniques)
128028-50-2, Proteinase-3
```

TΤ

ΙT

ΙT

ΙT

IT

ΙT

```
RL: ANT (Analyte); ANST (Analytical study)
         (IqG binding to; method for assaying biomols. and other constituents
        using indicator conjugates with synthetic nucleounits in
        lateral flow, liquid, and dry chemical techniques)
     50-36-2, Cocaine RL: ANT (Analyte); ANST (Analytical study)
ΙT
         (and metabolites; method for assaying biomols. and other constituents
        using indicator conjugates with synthetic nucleounits in
        lateral flow, liquid, and dry chemical techniques)
IT
     144-62-7, Ethanedioic acid, analysis
     RL: ANT (Analyte); ANST (Analytical study)
         (buffer/analyte; method for assaying biomols. and other constituents
        using indicator conjugates with synthetic nucleounits in
        lateral flow, liquid, and dry chemical techniques)
ΙT
     50-21-5, analysis
     RL: ANT (Analyte); ARU (Analytical role, unclassified); ANST (Analytical
     study)
         (buffer/analyte; method for assaying biomols. and other constituents
        using indicator conjugates with synthetic nucleounits in
        lateral flow, liquid, and dry chemical techniques)
                       77-92-9, Citric acid, analysis
ΙT
     77-86-1, TRIS
                                                           102-71-6,
     Triethanolamine, analysis
                                    103-47-9, CHES 110-15-6, Succinic acid,
                 150-25-4, BICINE
     analysis
                                      463-79-6, Carbonic acid, analysis
     497-19-8, Sodium carbonate, analysis 868-14-4, Potassium hydrogen
     tartrate 877-24-7, Potassium hydrogen phthalate 1135-40-6, CAPS 1303-96-4, Borax 1330-43-4, Soc
                                                              1132-61-2, MOPS
                 CAPS 1303-96-4, Borax 1330-43-4, Sodium tetraborate MES 5625-37-6, PIPES 5704-04-1, TRICINE 6976-37-0, 7365-44-8, TES 7365-45-9, HEPES 7365-82-4, ACES
     4432-31-9, MES
     BIS-TRIS
     7601-89-0, Sodium perchlorate 7601-90-3, Perchloric acid, analysis
     7664-38-2, Phosphoric acid, analysis 7664-93-9, Sulfuric acid, analysis
                                           7775-09-9, Sodium chlorate
     7697-37-2, Nitric acid, analysis
                                           10191-18-1, BES 10196-30-2,
     10043-35-3, Boric acid, analysis
     2-Amino-2-ethyl-1-propanol
                                    13530-68-2, Chromic acid
                                                                  16052-06-5, EPPS
     26239-55-4, ADA
                       29915-38-6, N-Tris[Hydroxymethyl]methyl-3-
                                   64431-96-5, BIS-TRIS PROPANE
68399-78-0, HEPPSO 68399-79
     aminopropanesulfonic acid
                                                                    68189-43-5,
              68399-77-9, MOPSO
                                                         68399-79-1, AMPSO
                           68399-81-5, TAPSO
     68399-80-4, DIPSO
                                                 73463-39-5, CAPSO 109191-31-3,
     N-[2-Acetamido]-2-aminoethanesulfonic acid)
     RL: ARU (Analytical role, unclassified); ANST (Analytical study)
         (buffer; method for assaying biomols. and other constituents using
        indicator conjugates with synthetic nucleounits in lateral
        flow, liquid, and dry chemical techniques)
     9001-60-9, Lactate dehydrogenase 9002-12-4, Uricase
                                           9001-78-9, Alkaline phosphatase
ΙT
     RL: ANT (Analyte); ANST (Analytical study)
         (indicator/analyte; method for assaying biomols. and other constituents
        using indicator conjugates with synthetic nucleounits in
        lateral flow, liquid, and dry chemical techniques) 59-8, NADP 53-84-9, Nicotinamide adenine dinucleotide
     53-59-8, NADP
IT
     83-07-8, 4-Aminoantipyrine 87-66-1, Pyrogallol 91-67-8,
     N, N-Diethyl-m-toluidine 91-95-2, 3, 3'-Diaminobenzidine Phenol, biological studies 119-90-4 120-83-2, 2, 4-Dic
                                                                     108-95-2,
                                                 120-83-2, 2,4-Dichlorophenol
     121-69-7, Dimethylaniline, biological studies 132-32-1, 3-Amino-9-ethyl
                  298-83-9, Nitro Blue Tetrazolium
                                                         369-07-3,
     carbazole
     2-Nitrophenyl-β-D-galactopyranoside 1094-61-7, Nicotinamide
     mononucleotide
                       1128-67-2, 3-Methyl-2-benzothiazolinonehydrazone
     1851-07-6, Nicotinamide hypoxanthine dinucleotide
                                                              2280-44-6,
     Glucopyranose 2438-80-4 3025-88-5, 2-5, Dimethyl-2,5-
     dihydroperoxyhexane 3150-24-1 3416-24-8, Glucosamine 5094-33-7,
```

```
4-Aminophenyl-\beta-D-galactopyranoside 6160-80-1, 4-Methylumbelliferyl-
\beta-D-glucuronide 6556-12-3, Glucuronic acid 6739-64-6,
Nicotinamide hypoxanthine dinucleotide phosphate 7240-90-6
              7535-00-4, Galactosamine 9001-34-7, Galactosidase
9001-37-0, Glucose oxidase 9001-40-5, Glucose-6-phosphate dehydrogenase
9001-45-0, Glucuronidase 9001-46-1, Glutamate dehydrogenase 9001-55-2,
Hydroxybutyrate dehydrogenase 9001-64-3, Malate dehydrogenase
9001-65-4, Mannitol dehydrogenase 9001-68-7, NADPH oxidoreductase 9002-17-9, Xanthine oxidase 9003-99-0, Peroxidase 9013-05-2,
Phosphatase 9013-79-0, Esterase 9016-17-5, Aryl sulfatase 9016-18-6,
Carboxyl esterase 9025-35-8, \alpha-Galactosidase 9026-00-0, Cholesterol esterase 9028-14-2, Glycerol dehydrogenase 9028-53-9,
Glucose dehydrogenase
                                       9028-67-5, Choline oxidase 9028-76-6,
Cholesterol oxidase 9028-84-6, Formaldehyde dehydrogenase 9029-44-1,
Ascorbate oxidase 9031-11-2, \beta-Lactosidase 9032-92-2, Glycosidase 9033-06-1, Glucosidase 9035-73-8, Oxidase 9035-82-9, Dehydrogenase
9046-28-0, Glycerophosphate oxidase 9046-59-7, Hydroxylase
Oxidoreductase
                             9067-74-7, Arabinosidase 9068-67-1, Sulfatase
9073-63-6, Alcohol oxidase
                                               9075-65-4, Glycerol-3-phosphate dehydrogenase
9082-71-7, Leucine dehydrogenase 10257-31-5, Xylopyranose
28752-68-3, ABTS
                                33993-25-8, 2-Naphthyl-\beta-D-galactopyranoside
36473-36-6 36783-03-6, TOPS 37211-66-8, Mannosidase 3° \beta-D-Cellobiosidase 45935-73-7, p-Hydroxybenzene Sulfonate
46032-76-2, Mannopyranose 46489-28-5 50443-29-3 51349-63-4
                      54827-17-7, 3,3',5,5'-Tetramethylbenzidine
61116-22-1, Acyl-CoA oxidase 72943-20-5
51652-08-5
                                                                                                   56846-39-0
56973-46-7
                                                                                                  82611-88-9
                               83777-30-4, DAOS 88795-34-0, ADPS 8929
90836-13-8, ALOS 91395-87-8 93863-88-8
82692-96-4, ADOS
                                                                                                  89299-64-9,
Arabinopyranose
                                                                                                            94129-58-5
96497-76-6 97753-82-7 99304-66-2, DAPS 99304-67-3, MAPS
                        102636-89-5, ALPS 110592-38-6 111070-05-4, Fucosidase
101764-19-6
112046-91-0 113079-84-8 125858-89-1, Xylosidase 126400-78-0,
N-Ethyl-N-(2-hydroxy-3-sulfopropyl)-3,5-dimethylaniline 126787-65-3
135622-84-3, Fructose dehydrogenase 138182-21-5 181066-50-2,
Bis-MAPS-C 2 207595-15-1 207727-11-5 380637-04-7, MADB 477532-32-4
RL: ARG (Analytical reagent use); DGN (Diagnostic use); ANST (Analytical
study); BIOL (Biological study); USES (Uses)
      (indicator; method for assaying biomols. and other constituents using
     indicator conjugates with synthetic nucleounits in lateral
     flow, liquid, and dry chemical techniques)
50-00-0, Formaldehyde, analysis 50-02-2, Dexamethasone
50-06-6, Phenobarbital, analysis 50-22-6, Corticosterone
50-23-7, Cortisol 50-27-1, Estriol 50-28-2, Estradiol, analysis 50-33-9, Phenylbutazone, analysis 50-47-5, Desipramine 50-48-6, Amitriptyline 50-49-7, Imipramine 50-52-2, Thioridazine 50-53-3, Chlorpromazine, analysis 50-56-6, Oxytocin, analysis 50-56-6,
Serotonin, analysis 50-81-7, Ascorbic acid, analysis 50-99-7, Glucose,
analysis 51-06-9, Procainamide 51-35-4, Hydroxyproline 51-48-9, Thyroxine, analysis 52-39-1, Aldosterone 52-90-4, Cysteine, analysis
                  51-06-9, Procainamide 51-35-4, Hydroxyproline
53-02-1, Tetrahydrocortisol 53-16-7, Estrone, analysis 53-43-0,
Dehydroepiandrosterone 54-16-0, 5-Hydroxyindoleacetic acid, analysis
                                   54-85-3, Isoniazid 55-10-7, Vanillylmandelic acid
54-36-4, Metyrapone
56-40-6, Glycine, analysis 56-41-7, Alanine, analysis
                                                                                                 56-54-2,
                    56-73-5, Glucose-6-phosphate 56-75-7, Chloramphenicol
Quinidine
56-81-5, Glycerol, analysis 56-85-9, Glutamine, analysis 56-89-3,
Cystine, analysis 57-00-1, Creatine 57-12-5, Cyanide, analysis 57-13-6, Urea, analysis 57-27-2, Morphine, analysis 57-41-0,
Diphenylhydantoin 57-42-1, Meperidine 57-43-2, Amobarbital
Fructose, analysis 57-50-1, Sucrose, analysis 57-53-4, Meprobamate
57-83-0, Progesterone, analysis 57-88-5, Cholesterol, analysis
```

ΙT

58-08-2, Caffeine, analysis 58-22-0, Testosterone 58-25-3, Chlordiazepoxide 58-55-9, Theophylline, analysis 58-86-6, Xylose, analysis 59-05-2, Methotrexate 59-23-4, Galactose, analysis 59-59-67-6, Niacin, analysis 60-18-4, Tyrosine, analysis reatinine 60-92-4, Cyclic AMP 61-90-5, Leucine, analysis analysis 60-27-5, Creatinine 60-92-4, Cyclic AMP 61-90-5, Leucine, and 62-44-2, Phenacetin 63-05-8, Androstenedione 63-42-3, Lactose 63-68-3, Methionine, analysis 63-91-2, Phenylalanine, analysis 64-17-5, Ethanol, analysis 64-77-7, Tolbutamide 64-85-7, 11-Deoxycorticosterone 67-56-1, Methanol, analysis 68-60-0, Tetrahydrodeoxycortisol 68-96-2, 17-Hydroxyprogesterone 69-72-7D, Salicylic acid, derivs. 69-93-2, Uric acid, analysis 70-18-8, 72-18-4, Valine, analysis 72-44-6, Methaqualone Glutathione, analysis 72-69-5, Nortriptyline 73-32-5, Isoleucine, analysis 76-42-6, Oxycodone 76-57-3, Codeine 76-73-3, Secobarbital 76-74-4, Pentobarbital 76-75-5, Thiopental 76-99-3, Methadone 77-10-1, Phencyclidine 77-21-4, Glutethimide 77-41-8, Methsuximide 77-67-8, Ethosuximide 79-14-1, Glycolic acid, analysis 79-83-4, Pantothenic acid 80-92-2 81-25-4, Cholic acid 82-58-6, Lysergic acid 83-44-3, Deoxycholic acid 83-88-5, Riboflavin, analysis 86-34-0, Phensuximide 87-86-5, Pentachlorophenol 97-31-4, Normetanephrine 99-66-1, Valproic acid 103-90-2, Acetaminophen 107-21-1, Ethylene glycol, analysis 113-18-8, Ethchlorvynol 123-63-7, Paraldehyde 125-33-7, Primidone 125-64-4, Methyprylon 127-17-3, Pyruvic acid, analysis 137-58-6, Lidocaine 143-74-8, Phenolsulfonphthalein 145-13-1, Pregnenolone 152-58-9, 11-Deoxycortisol 298-46-4, Carbamazepine 299-42-3, Ephedrine 300-62-9, Amphetamine 302-04-5, Thiocyanate, analysis 302-17-0, Chloral hydrate 306-08-1, Homovanillic acid 359-83-1, Pentazocine 438-60-8, Protriptyline 439-14-5, Diazepam 451-13-8, Homogentisic acid 466-99-9, Hydromorphone 469-62-5, Propoxyphene 487-90-1, Porphobilinogen 521-18-6, Dihydrotestosterone 525-66-6, Propranolol 537-46-2, Methamphetamine 553-12-8, Protoporphyrin 555-30-6, Methyldopa 591-81-1, γ-Hydroxybutyric acid 604-75-1, Oxazepam 635-65-4, Bilirubin, analysis 651-48-9, Dehydroepiandrosterone sulfate 846-49-1, Lorazepam 1098-45-9, Pregnanetriol 1319-82-0, Aminocaproic 1330-20-7, Xylene, analysis 1393-25-5, Secretin 1403-66-3, Gentamicin 1404-90-6, Vancomycin 1622-61-3, Clonazepam 1668-19-5, Doxepin 3737-09-5, Disopyramide 4205-90-7, Clonidine 4429-04-3, Fructosamine 4685-14-7, Paraquat 4697-36-3, Carbenicillin 5001-33-2, 5817-39-0, Reverse triiodothyronine 6027-13-0, Metanephrine 6893-02-3, Triiodothyronine 7439-89-6, Iron, analysis Homocysteine 7439-93-2, Lithium, analysis 7439-95-4, 7439-92-1, Lead, analysis 7439-97-6, Mercury, analysis 7439-98-7, 7440-02-0, Nickel, analysis 7440-28-0, Thallium, Magnesium, analysis Molybdenum, analysis analysis 7440-47-3, Chromium, analysis 7440-57-5, Gold, analysis 7440-66-6, Zinc, analysis 7440-70-2, Calcium, analysis 7782-49-2, Selenium, analysis 7783-06-4, Hydrogen sulfide, analysis 8063-07-8, Kanamycin 9000-86-6, Alanine aminotransferase 9000-92-4, Amylase 9000-94-6, Antithrombin 9001-08-5, Pseudocholinesterase 9001-10-9, Pepsinogen 9001-15-4, Creatine kinase 9001-58-5, Isocitrate dehydrogenase 9001-62-1, Lipase 9001-63-2, Lysozyme 9001-77-8, Acid phosphatase 9001-80-3, Phosphofructokinase 9001-91-6, Plasminogen 9002-60-2, Adrenocorticotropic hormone, analysis 9002-61-3, Chorionic gonadotropin 9002-64-6, Parathyroid hormone 9002-68-0, Follicle 9002-71-5, Thyroid stimulating hormone 9002-72-6, stimulating hormone Growth hormone 9002-76-0, Gastrin 9004-07-3, Chymotrypsin 9004-10-8, 9007-92-5, Glucagon, analysis Insulin, analysis 9007-12-9, Calcitonin 9014-48-6, Transketolase 9015-94-5, Renin, analysis 9024-52-6, 9035-68-1, Proinsulin Aldolase 9035-54-5, Placental lactogen 9035-81-8, Antitrypsin 11000-17-2, Antidiuretic hormone 11016-39-0,

```
12794-10-4D, Benzodiazepine, derivs.
      Properdin
                                                                   14797-65-0, Nitrite,
      analysis
                   14838-15-4, Phenylpropanolamine 15687-27-1, Ibuprofen
                                    20830-75-5, Digoxin
      17617-23-1, Flurazepam
                                                              23887-31-2, Clorazepate
     24305-27-9, Thyrotropin-releasing hormone 24959-67-9, Bromide, analysis 26316-36-9, Uroporphyrin 27121-71-7, Coproporphyrin 29679-58-1,
                                                               32986-56-4, Tobramycin
      Fenoprofen
                     32795-44-1, n-Acetylprocainamide
      37221-79-7, Vasoactive intestinal polypeptide
                                                                37517-28-5, Amikacin
      39335-01-8, Macroamylase 51481-61-9, Cimetidine
                                                                    54143-55-4, Flecainide
      56391-56-1, Netilmicin 59112-80-0, c-Peptide
                                                                 59763-91-6, Pancreatic
                       59865-13-3, Cyclosporine
      polypeptide
                                                      67763-96-6, Somatomedin c
     69776-17-6 85876-02-4, Glutamyltransferase RL: ANT (Analyte); ANST (Analytical study)
                                                              152923-57-4, Lutropin
          (method for assaying biomols. and other constituents using indicator
         conjugates with synthetic nucleounits in lateral flow, liquid,
         and dry chemical techniques)
      7727-37-9, Nitrogen, analysis
ΙT
      RL: ANT (Analyte); ANST (Analytical study)
         (protein-associated and nonprotein; method for assaying biomols. and other
     constituents using indicator conjugates with synthetic nucleounits in lateral flow, liquid, and dry chemical techniques) 50-02-2, Dexamethasone 50-22-6, Corticosterone 50-23-7, Cortisol RL: ANT (Analyte); ANST (Analytical study)
ΙT
         (method for assaying biomols. and other constituents using indicator
         conjugates with synthetic nucleounits in lateral flow, liquid,
         and dry chemical techniques)
      50-02-2 HCAPLUS
RN
      Pregna-1, 4-diene-3, 20-dione, 9-fluoro-11, 17, 21-trihydroxy-16-methyl-,
CN
      (11\beta, 16\alpha) - (9CI)
                          (CA INDEX NAME)
```

Absolute stereochemistry.

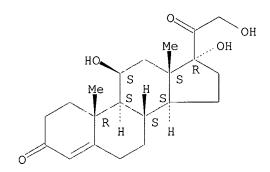
RN 50-22-6 HCAPLUS CN Pregn-4-ene-3,20-dione, 11,21-dihydroxy-, (11β)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 50-23-7 HCAPLUS

CN Pregn-4-ene-3,20-dione, 11,17,21-trihydroxy-, (11 $\beta$ )- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L46 ANSWER 24 OF 65 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2002:907161 HCAPLUS

DN 138:13500

ED Entered STN: 29 Nov 2002

TI Superantigen-glycolipid conjugates loaded onto antigen presening cells for adoptive immunotherapy of neoplastic and infectious diseases

IN Terman, David S.

PA USA

SO U.S. Pat. Appl. Publ., 167 pp.

CODEN: USXXCO

DT Patent

LA English

IC ICM A61K038-17

ICS C12N005-06; C07K014-705

NCL 514012000; 435325000; 530350000

CC 15-2 (Immunochemistry)

Section cross-reference(s): 3, 9, 63

FAN.CNT 1

r AN.	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI PRAI	US 2002177551 US 2000-208128P	A1 P	20021128 20000531	US 2001-870759	20010530

CLASS

PATENT NO. CLASS PATENT FAMILY CLASSIFICATION CODES

```
US 2002177551
                 ICM
                        A61K038-17
                 ICS
                        C12N005-06; C07K014-705
                 NCL
                        514012000; 435325000; 530350000
AΒ
     The present invention comprises compns. and methods for treating a tumor
     or neoplastic disease in a host, The methods employ conjugates comprising
     superantigen polypeptides, nucleic acids with other structures that
     preferentially bind to tumor cells and are capable of inducing apoptosis.
     Also provided are superantigen-glycolipid conjugates and vesicles that are
     loaded onto antigen presenting cells to activate both T cells and NKT
             Cell-based vaccines comprise tumor cells engineered to express a
     superantigen along with glycolipids products which, when expressed, render
     the cells capable of eliciting an effective anti-tumor immune response in
     a mammal into which these cells are introduced. Included among these
     compns. are tumor cells, hybrid cells of tumor cells and accessory cells,
     preferably dendritic cells. Also provided are tumoricidal T cells and NKT
     cells devoid of inhibitory receptors or inhibitory signaling motifs which
     are hyperresponsive to the the above compns. and lipid-based tumor associated
     antigens that can be administered for adoptive immunotherapy of cancer and
     infectious diseases.
     superantigen glycolipid conjugate antigen presenting cell cancer infection
     immunotherapy
TΤ
     Animal tissue
     Multiple myeloma
     Prostate gland
        (-specific promoter; superantigen-glycolipid conjugates loaded onto
        antigen presening cells for adoptive immunotherapy of neoplasm and
        infection)
     Albumins, biological studies
ТТ
     Antibodies and Immunoglobulins
     α-Fetoproteins
     RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (-specific promoter; superantigen-glycolipid conjugates loaded onto
        antigen presening cells for adoptive immunotherapy of neoplasm and
        infection)
     Gene, microbial
ΙT
     RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (1pxA; superantigen-glycolipid conjugates loaded onto antigen presening
        cells for adoptive immunotherapy of neoplasm and infection)
IΤ
     Gene, microbial
     RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (lpxB; superantigen-glycolipid conjugates loaded onto antigen presening
        cells for adoptive immunotherapy of neoplasm and infection)
ΙT
     Gene, microbial
     RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (lpxC; superantigen-glycolipid conjugates loaded onto antigen presening
        cells for adoptive immunotherapy of neoplasm and infection)
IT
     Gene, microbial
     RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (1pxD; superantigen-glycolipid conjugates loaded onto antigen presening
        cells for adoptive immunotherapy of neoplasm and infection)
TI
     Proteins
     RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
```

(55,000-mol.-weight; superantigen-glycolipid conjugates loaded onto

```
antigen presening cells for adoptive immunotherapy of neoplasm and
        infection)
IT
     Proteins
     RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (A; superantigen-glycolipid conjugates loaded onto antigen presening
        cells for adoptive immunotherapy of neoplastic and infectious diseases)
ΙT
     Apolipoproteins
     RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (B; superantigen-glycolipid conjugates loaded onto antigen presening
        cells for adoptive immunotherapy of neoplastic and infectious diseases)
ΙT
     CD antigens
     RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (CD33; superantigen-glycolipid conjugates loaded onto antigen presening
        cells for adoptive immunotherapy of neoplastic and infectious diseases)
ΙT
     Trypanosoma cruzi
        (Chagas' disease from; superantigen-glycolipid conjugates loaded onto
        antigen presening cells for adoptive immunotherapy of neoplastic and
        infectious diseases)
IT
     Proteins
     RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (E1B; superantigen-glycolipid conjugates loaded onto antigen presening
        cells for adoptive immunotherapy of neoplastic and infectious diseases)
ΙT
     Proteins
     RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (E6; superantigen-glycolipid conjugates loaded onto antigen presening
        cells for adoptive immunotherapy of neoplastic and infectious diseases)
IT
     Proteins
     RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (E7; superantigen-glycolipid conjugates loaded onto antigen presening
        cells for adoptive immunotherapy of neoplastic and infectious diseases)
IT
    Apolipoproteins
     RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (E; superantigen-glycolipid conjugates loaded onto antigen presening
        cells for adoptive immunotherapy of neoplastic and infectious diseases)
ΙT
     Proteins
     RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (GLTP or glycolipid transfer proteins; superantigen-glycolipid
        conjugates loaded onto antigen presening cells for adoptive
        immunotherapy of neoplasm and infection)
IT
     Protein motifs
        (ITIM (immunoreceptor tyrosine-based inhibition motif);
        superantigen-glycolipid conjugates loaded onto antigen presening cells
        for adoptive immunotherapy of neoplastic and infectious diseases)
IT
     Transcription factors
     RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
     THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
        (IκB-α (NF-κB inhibitor α);
        superantigen-glycolipid conjugates loaded onto antigen presening cells
        for adoptive immunotherapy of neoplastic and infectious diseases)
ΙT
     Receptors
```

## Cordero-Garcia PCT/US03/26233

```
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (LOX-1; superantigen-glycolipid conjugates loaded onto antigen
        presening cells for adoptive immunotherapy of neoplasm and infection)
ΙT
     Apolipoproteins
     RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (Lp(a); superantigen-glycolipid conjugates loaded onto antigen
        presening cells for adoptive immunotherapy of neoplastic and infectious
        diseases)
     Glycoproteins
ΙT
     RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (MAG (myelin-associated glycoprotein); superantigen-glycolipid conjugates
        loaded onto antigen presening cells for adoptive immunotherapy of
        neoplastic and infectious diseases)
     Histocompatibility antigens
TT
     RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (MHC (major histocompatibility complex), class I; superantigen-
        glycolipid conjugates loaded onto antigen presening cells for adoptive
        immunotherapy of neoplastic and infectious diseases)
ΙT
     Histocompatibility antigens
     RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (MHC (major histocompatibility complex), class II; superantigen-
        glycolipid conjugates loaded onto antigen presening cells for adoptive
        immunotherapy of neoplastic and infectious diseases)
ТТ
     Receptors
     RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (SREC; superantigen-glycolipid conjugates loaded onto antigen presening
        cells for adoptive immunotherapy of neoplasm and infection)
ΙT
     Proteins
     RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (SU (surface); superantigen-glycolipid conjugates loaded onto antigen
        presening cells for adoptive immunotherapy of neoplastic and infectious
        diseases)
ΙT
     Toxins
     RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (Shiga-like toxin; superantigen-glycolipid conjugates loaded onto
        antigen presening cells for adoptive immunotherapy of neoplastic and
        infectious diseases)
IT
    Agglutinins and Lectins
     RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
     PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological
     study); PREP (Preparation); USES (Uses)
        (Siglec 1-7; superantigen-glycolipid conjugates loaded onto antigen
        presening cells for adoptive immunotherapy of neoplastic and infectious
        diseases)
     Transforming growth factor receptors
ΙT
     RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (TGF-\beta receptor, type V; superantigen-glycolipid conjugates loaded
        onto antigen presening cells for adoptive immunotherapy of neoplastic
        and infectious diseases)
     T cell (lymphocyte)
IT
```

ΙT

ΙT

IT

ΙT

IT

ΙT

ΙT

IT

ΤТ

ΙT

ΙT

```
(activation; superantiqen-glycolipid conjugates loaded onto antiqen
   presening cells for adoptive immunotherapy of neoplastic and infectious
   diseases)
Proteins
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
(Biological study); USES (Uses)
   (adaptor; superantigen-glycolipid conjugates loaded onto antigen
   presening cells for adoptive immunotherapy of neoplasm and infection)
Gene, microbial
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
(Biological study); USES (Uses)
   (agr; superantigen-glycolipid conjugates loaded onto antigen presening
   cells for adoptive immunotherapy of neoplastic and infectious diseases)
Immune tolerance
   (anergy, T cell; superantigen-glycolipid conjugates loaded onto antigen
   presening cells for adoptive immunotherapy of neoplastic and infectious
Molecules
   (antitumor; superantigen-glycolipid conjugates loaded onto antigen
   presening cells for adoptive immunotherapy of neoplasm and infection)
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
(Biological study); USES (Uses)
   (apoproteins; superantigen-glycolipid conjugates loaded onto antigen
   presening cells for adoptive immunotherapy of neoplastic and infectious
   diseases)
Infection
   (bacterial; superantigen-glycolipid conjugates loaded onto antigen
   presening cells for adoptive immunotherapy of neoplastic and infectious
   diseases)
Sialic acids
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological
study); PREP (Preparation); USES (Uses)
   (binding lectins; superantigen-glycolipid conjugates loaded onto
   antigen presening cells for adoptive immunotherapy of neoplasm and
   infection)
Gene, animal
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
(Biological study); USES (Uses)
   (c-abl; superantigen-glycolipid conjugates loaded onto antigen
   presening cells for adoptive immunotherapy of neoplastic and infectious
   diseases)
Gene, animal
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
(Biological study); USES (Uses)
   (c-erbB; superantigen-glycolipid conjugates loaded onto antigen
   presening cells for adoptive immunotherapy of neoplastic and infectious
   diseases)
Polysaccharides, biological studies
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
(Biological study); USES (Uses)
   (capsular; superantigen-glycolipid conjugates loaded onto antigen
   presening cells for adoptive immunotherapy of neoplastic and infectious
   diseases)
Enzymes, biological studies
```

(carbohydrate-modifying; superantigen-glycolipid conjugates loaded onto

RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL

(Biological study); USES (Uses)

- antigen presening cells for adoptive immunotherapy of neoplasm and infection)
- IT Lung, neoplasm

(carcinoma; superantigen-glycolipid conjugates loaded onto antigen presening cells for adoptive immunotherapy of neoplastic and infectious diseases)

IT Sarcoma

(carcinosarcoma, Walker; superantigen-glycolipid conjugates loaded onto antigen presening cells for adoptive immunotherapy of neoplasm and infection)

IT Proteins

RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(cell cycle-regulating; superantigen-glycolipid conjugates loaded onto antigen presening cells for adoptive immunotherapy of neoplastic and infectious diseases)

IT Erythrocyte

(cell membrane, sickled; superantigen-glycolipid conjugates loaded onto antigen presening cells for adoptive immunotherapy of neoplasm and infection)

IT Muscle

(cell; superantigen-glycolipid conjugates loaded onto antigen presening cells for adoptive immunotherapy of neoplasm and infection)

IT Diglycerides

RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(digalactosyl, ceramide; superantigen-glycolipid conjugates loaded onto antigen presening cells for adoptive immunotherapy of neoplasm and infection)

IT Hematopoiesis

(disorders, neoplasm; superantigen-glycolipid conjugates loaded onto antigen presening cells for adoptive immunotherapy of neoplasm and infection)

IT Lymphocyte

(effector cell; superantigen-glycolipid conjugates loaded onto antigen presening cells for adoptive immunotherapy of neoplastic and infectious diseases)

IT Gene, microbial

RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(emm-like; superantigen-glycolipid conjugates loaded onto antigen presening cells for adoptive immunotherapy of neoplasm and infection)

IT Toxins

RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(enterotoxin B; superantigen-glycolipid conjugates loaded onto antigen presening cells for adoptive immunotherapy of neoplastic and infectious diseases)

IT Receptors

RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(enterotoxin; superantigen-glycolipid conjugates loaded onto antigen presening cells for adoptive immunotherapy of neoplastic and infectious diseases)

IT Cell membrane

(erythrocyte, sickled; superantigen-glycolipid conjugates loaded onto antigen presening cells for adoptive immunotherapy of neoplasm and infection)

IT Toxins

- RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
  - (erythrogenic; superantigen-glycolipid conjugates loaded onto antigen presening cells for adoptive immunotherapy of neoplastic and infectious diseases)
- IT Organelle
  - (exocytotic granule; superantigen-glycolipid conjugates loaded onto antigen presening cells for adoptive immunotherapy of neoplastic and infectious diseases)
- IT Organelle
  - (exosome (exonuclease complex); superantigen-glycolipid conjugates loaded onto antigen presening cells for adoptive immunotherapy of neoplastic and infectious diseases)
- IT Insulin-like growth factor I receptors
  - RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
    - (gene; superantigen-glycolipid conjugates loaded onto antigen presening cells for adoptive immunotherapy of neoplasm and infection)
- IT Lipoproteins
  - RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
    - (high-d.; superantigen-glycolipid conjugates loaded onto antigen presening cells for adoptive immunotherapy of neoplastic and infectious diseases)
- IT Proteins
  - RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
    - (immunostimulatory; superantigen-glycolipid conjugates loaded onto antigen presening cells for adoptive immunotherapy of neoplasm and infection)
- IT Protein motifs
  - (inhibitory signaling; superantigen-glycolipid conjugates loaded onto antigen presening cells for adoptive immunotherapy of neoplastic and infectious diseases)
- IT Receptors
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (inhibitory; superantigen-glycolipid conjugates loaded onto antigen presening cells for adoptive immunotherapy of neoplastic and infectious diseases)
- IT Drug delivery systems
  - (injections, i.m.; superantigen-glycolipid conjugates loaded onto antigen presening cells for adoptive immunotherapy of neoplastic and infectious diseases)
- IT Drug delivery systems
  - (injections, i.p.; superantigen-glycolipid conjugates loaded onto antigen presening cells for adoptive immunotherapy of neoplastic and infectious diseases)
- IT Drug delivery systems
  - (injections, i.v.; superantigen-glycolipid conjugates loaded onto antigen presening cells for adoptive immunotherapy of neoplastic and infectious diseases)
- IT Drug delivery systems
  - (injections, intradermal; superantigen-glycolipid conjugates loaded onto antigen presening cells for adoptive immunotherapy of neoplasm and infection)
- IT Drug delivery systems
  - (injections, s.c.; superantigen-glycolipid conjugates loaded onto antigen presening cells for adoptive immunotherapy of neoplastic and infectious diseases)

ΙT Drug delivery systems (injections; superantigen-glycolipid conjugates loaded onto antigen presening cells for adoptive immunotherapy of neoplastic and infectious diseases) ΙT Histoplasma capsulatum Leishmania donovani Neurospora crassa Saccharomyces cerevisiae (inositolphosphorylceramide extraction; superantigen-glycolipid conjugates loaded onto antigen presening cells for adoptive immunotherapy of neoplasm and infection) TILipoproteins RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (intermediate-d.; superantigen-glycolipid conjugates loaded onto antigen presening cells for adoptive immunotherapy of neoplastic and infectious diseases) ΙT Proteins RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (lipid-binding; superantigen-glycolipid conjugates loaded onto antigen presening cells for adoptive immunotherapy of neoplastic and infectious diseases) ΙT Lipopolysaccharides RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (lipoarabinomannans; superantigen-glycolipid conjugates loaded onto antigen presening cells for adoptive immunotherapy of neoplastic and infectious diseases) ΙT Drug delivery systems (liposomes; superantigen-glycolipid conjugates loaded onto antigen presening cells for adoptive immunotherapy of neoplastic and infectious diseases) ΙT Lipoproteins RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (low-d., oxidized; superantigen-glycolipid conjugates loaded onto antigen presening cells for adoptive immunotherapy of neoplastic and infectious diseases) ΙT Lipoproteins RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (low-d.; superantigen-glycolipid conjugates loaded onto antigen presening cells for adoptive immunotherapy of neoplastic and infectious diseases) ΙT Leukemia (lymphocytic; superantigen-glycolipid conjugates loaded onto antigen presening cells for adoptive immunotherapy of neoplastic and infectious diseases) IΤ Animal cell (mammalian; superantigen-glycolipid conjugates loaded onto antigen presening cells for adoptive immunotherapy of neoplastic and infectious diseases) ΙT Neoplasm (metastasis; superantigen-glycolipid conjugates loaded onto antigen presening cells for adoptive immunotherapy of neoplastic and infectious diseases)

(microvasculature; superantigen-glycolipid conjugates loaded onto

Blood vessel

ΙT

- antigen presening cells for adoptive immunotherapy of neoplasm and infection)
- IT Carbohydrates, biological studies
  - RL: BSU (Biological study, unclassified); BIOL (Biological study) (modifying enzyme; superantigen-glycolipid conjugates loaded onto antigen presening cells for adoptive immunotherapy of neoplasm and infection)
- IT Signal transduction, biological (motif; superantigen-glycolipid conjugates loaded onto antigen presening cells for adoptive immunotherapy of neoplastic and infectious diseases)
- IT Glycolipids
  - RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
    - (myco-; superantigen-glycolipid conjugates loaded onto antigen
      presening cells for adoptive immunotherapy of neoplasm and infection)

- IT Gene, animal
   RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
   (Biological study); USES (Uses)
  - (oncogene; superantigen-glycolipid conjugates loaded onto antigen presening cells for adoptive immunotherapy of neoplastic and infectious diseases)
- IT Sphingolipids
  RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
  PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
  - (phosphosphingolipids; superantigen-glycolipid conjugates loaded onto antigen presening cells for adoptive immunotherapy of neoplastic and infectious diseases)
- IT Sphingosines
  - RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
    - (phytosphingosines; superantigen-glycolipid conjugates loaded onto antigen presening cells for adoptive immunotherapy of neoplastic and infectious diseases)
- IT Mutagenesis
  - (point; superantigen-glycolipid conjugates loaded onto antigen presening cells for adoptive immunotherapy of neoplasm and infection)
- IT Enzymes, biological studies
  RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
  - (prodrug; superantigen-glycolipid conjugates loaded onto antigen presening cells for adoptive immunotherapy of neoplasm and infection)
- IT Proteins
  - RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
    - (prosaposins; superantigen-glycolipid conjugates loaded onto antigen

```
presening cells for adoptive immunotherapy of neoplastic and infectious
        diseases)
ΙT
     Immunostimulants
        (proteins; superantigen-glycolipid conjugates loaded onto antigen
        presening cells for adoptive immunotherapy of neoplasm and infection)
ΙT
     Glycolipids
     RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
     PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological
     study); PREP (Preparation); USES (Uses)
        (proteo-; superantigen-glycolipid conjugates loaded onto antigen
        presening cells for adoptive immunotherapy of neoplastic and infectious
        diseases)
ΙT
     CD1 (antigen)
     RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (receptor; superantigen-glycolipid conjugates loaded onto antigen
        presening cells for adoptive immunotherapy of neoplasm and infection)
ΙT
     Proteins
     RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (saposins; superantigen-glycolipid conjugates loaded onto antigen
        presening cells for adoptive immunotherapy of neoplastic and infectious
        diseases)
ΙT
    Agglutinins and Lectins
     RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
     PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological
     study); PREP (Preparation); USES (Uses)
        (sialic acid-binding; superantigen-glycolipid conjugates loaded onto
        antigen presening cells for adoptive immunotherapy of neoplasm and
        infection)
ΙT
     Adhesins
     RL: BSU (Biological study, unclassified); PUR (Purification or recovery);
     THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
     (Uses)
        (sialoadhesins; superantigen-glycolipid conjugates loaded onto antigen
        presening cells for adoptive immunotherapy of neoplastic and infectious
        diseases)
ΙT
    Neoplasm
        (solid; superantigen-glycolipid conjugates loaded onto antigen
        presening cells for adoptive immunotherapy of neoplastic and infectious
        diseases)
ΙT
     Sphingomonas paucimobilis
        (superantigen-glycolipid conjugates loaded onto antigen presening cells
        for adoptive immunotherapy of neoplasm and infection)
ΙT
     Adenoviral vectors
    Adoptive immunotherapy
     Alphavirus
     Antigen-presenting cell
     Antitumor agents
    Apoptosis
    Carcinoma
     Dendritic cell
     Epitopes
    Eubacteria
    Eukaryota
     Fibroblast
    Gene therapy
    Human
    Human herpesvirus
```

```
Immunological accessory cell
Immunosuppressants
Infection
Influenza virus
Invertebrata
Leukemia
Lymphocyte
Lymphoma
Macrophage
Mammalia
Melanoma
Molecular cloning
Mycobacterium
Mycosis
Parasite
Phage display
Prokaryota
Protein sequences
Sarcoma
Staphylococcus
Staphylococcus aureus
Streptococcus
T cell (lymphocyte)
Trypanosoma cruzi
Yeast
   (superantigen-glycolipid conjugates loaded onto antigen presening cells
   for adoptive immunotherapy of neoplastic and infectious diseases)
Ceramides
Gangliosides
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological
study); PREP (Preparation); USES (Uses)
   (superantigen-glycolipid conjugates loaded onto antigen presening cells
   for adoptive immunotherapy of neoplastic and infectious diseases)
Fatty acids, biological studies
Fusion proteins (chimeric proteins)
Glycolipids
Nucleic acids
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
   (superantigen-glycolipid conjugates loaded onto antigen presening cells
   for adoptive immunotherapy of neoplastic and infectious diseases)
Glycosphingolipids
RL: BSU (Biological study, unclassified); PUR (Purification or recovery);
THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
   (superantigen-glycolipid conjugates loaded onto antigen presening cells
   for adoptive immunotherapy of neoplastic and infectious diseases)
Oligosaccharides, biological studies
RL: BSU (Biological study, unclassified); PUR (Purification or recovery);
THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
(Uses)
   (superantigen-glycolipid conjugates loaded onto antigen presening cells
   for adoptive immunotherapy of neoplastic and infectious diseases)
Polysaccharides, biological studies
RL: BSU (Biological study, unclassified); PUR (Purification or recovery);
THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
(Uses)
```

ΤТ

ΙT

TΨ

TΨ